THE PROGRESS IN MEDICAL CARE AND PUBLIC HEALTH IN REPUBLIC OF KOREA

October 1971

THE KOREAN MEDICAL ASSOCIATION
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FOREWORD

Today Korea is catching the eyes of the world with her rapid social, cultural and economic transitions and development in all fields including medical care and public health. We, the Korean physicians, who hold medical care, medical education and public health as our professions, believe that "economic development" is an empty phrase if it is not accompained by a connotation about the means for safeguarding the health and welfare of the people.

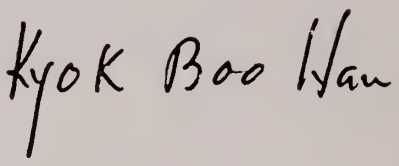
The road Korea has followed in terms of medical services has not always been smooth. It is only about 80 years since the system of medical care rooted in the modern concept of medicine was introduced into this country. We have undergone numerous political and social changes, we had the Korean War waged right on the door-steps of our homes, and now, we are summoning our total strength towards survival, progress and prosperity. We all know that we have come a long way and we have a long way yet to go.

This booklet, entitled "The Progress in Medical Care and Public Health in the Republic of Korea," is designed to present the readers with an overview of the historical background and current status of medical care and public health in Korea. Owing, however, to the hard-pressed time limit and the limited availability of systematic data, we are afraid that this may be of limited scope. Anyway, this was written not to persuade, but to present our concerns and problems as they are.

We are aware that we may not have been able to achieve what we have today in the fields of medical care and public health without the continuous moral and technical support extended from our friends all over the world during the last three-quarters of a century. We are the ones who are positive of the value of international cooperation in order to make further progress and to live as members of the world's professional family. This is the reason for this publication.

In closing, I would like to thank Dr. Tae Ryong Kim, Chief of the Research and Evaluation Division of the Korean Institute for Family Planning, for his time and efforts in writing and compiling this publication.

October 1971



Kyok Boo Han, M.D.
President
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I. HISTORY OF MEDICAL CARE SYSTEM

In the history of the medical care system, the 1880s marks a turning point, when H.N. Allen installed the first modernized hospital, named the "Kwangjewon." It was after this period that medical care and prevention of epidemics following the principles of modern medicine were first instituted in this country. Until then, the herb clinics practicing Chinese medicine were the sole medical institutions that provided the royal families and aristocrats as well as the common people with medical care. Thus, in discussing the historical development of medicine in Korea the 1880s constitute a convenient landmark between the old and the new.

1. The Ancient System

In the period beginning in 67 B. C. and ending in 676 A. D. there were three kingdoms on the Korean Peninsula; Koguryo, Silla and Baikje. In those days, medical practices and medical education as well as all other aspects of the society and culture were much in line with those in China.

It is recorded that the Kingdom Koguryo had a system of "Court Physicians" (Siui), who took care of the King and his family when they were ill.

In Baikje, a "Department of Pharmacy" was attached to the court, and a "Medical Doctor" was responsible for the country's medical affairs, while a "Collector of Medicine" (Chaeyaksa) was in charge of dealing with medical herbs and substances used for medical treatment. Thus, there was a clearly defined division between medical care and pharmacy.

2. The Period of Unified Silla (676-918 A. D.)

Within the Silla court a "Pharmacy" Office (Yackchun) was installed, and this was the organization responsible for the Kingdom's medical care administration. Among the official titles, there were such grades as "Chi," "Sa," and "Chong-sa-chi" and those holding these positions engaged directly in medical care and treatment. The "Kongbong" and "Naekongbong" physicians took care of the king and the queen when they were ill.

Among the reputable physicians who took care of the royal family, the one holding highest rank was called the "Nation's Doctor" (Koogui) and some monks who worked wonders were addressed as "Monk Doctors" (Sungui).

By the year 692 A. D., medical education was, by and large, of private or individual nature, but later, court-appointed "Nations' Doctors" trained a group of students who wanted to learn medicine.

3. Koryo Era (918-1392 A. D.)

This period may be characterized as the time of intermingling of the medical tradition inherited from Silla with the traditional Indian prescriptions that began to flow into this country under Buddhistic influence. With Buddhism flourishing as the Kingdom's religion, the medicine of Koryo came under the influence of Indian medicine.

With the progress of trade with the Song Dynusty, newly in power in China, the latest medical know-how originating in the Dynasty began to be extensively practiced in this country. It was also at this time that Song and Arabian merchants visiting the country brought with them varieties of rare and precious medicines produced in the "western" and "southern" or tropical regions.

Medicine in the latter half of the Koryo Dynasty became more unique in that measures were taken for domestic supplies

of medical herbs and drugs. Intensive research was directed towards domestic medical sustances and books on "home produced medicines" were written in this period. Koryo's unique development in medicine was well known to the Won Dynasty then governing China, who are reported to have thought very highly of the "Korean prescriptions."

Until the year 988 A. D. there is no recorded institution that provided medical care to the common people. In this year (the 8th Year of King Songjong), a provision was made so that even low class officials could receive treatment from the court physicians. It was also in this year that specific provisions were made to describe the various ranks attachable to court physicians, who were given responsibilities of varying importance in handling medical care administration. In 994 an institution was installed to provide emergency medical cares for the destitute or homeless. It was called the "Cheuibo." This institution was further given such functions as emergency care during epidemic outbreaks.

Earlier, during the initial period of the Koryo Dynasty, "Medical Institutes" were installed in the capital city of Kaesong, in Pyongyang, the "western capital," and in twelve provinces where the "Medical Doctors" (Uibaksa) taught medicine to students who were applying to be physicians. Towards the close of the Dynasty, a Dongsu Taebiwon" or an asylum was established to accommodate and treat the poor and sick. Another relief institution was installed in the year 1111 A. D. and was named "Heijingook."

4. Yi Dynasty (1392-1880 A. D.)

In the earlier period of the Yi Dynasty, there were such medical care facilities as "Naeyakbang," "Chunuigam," "Heimingook," Dongsu-Daibiwon," "Chesaengwon," "Chongyaksaek," and "Uihak" in Seoul and "Uiwon," "Uihak-Kyosugwan," "Uihak," and "Uihaksung" in the provinces.

"Naiyakbang" prescribed medicine to be administered orally, "Chunuigam" was responsible for diagnosis and care of the royal family as well as the high ranking officials, and "Heimingook" collected domestically produced medicinal materials and treated the common people. The "Dongsu Daibiwon" treated mainly the "communicable" patients and isolated them at times of epidemic outbreaks.

The "Cheisaengwon" established in 1397 (the 7th Year of King Taejo), together with the "Heimingook" and "Chunuigam" devoted itslef to the treatment of the common people. When epidemics broke out, these two institutions shared responsibility with the "Dongsu-Daebiwon" in isolating and treating those who contracted communicable diseases, and in providing relief measures.

In 1485 when King Sungjong was on the throne, efforts were made to subdivide the system of medical care administration for endowing each of the divisions with specialized functions. It was then that such titles as "Uimugwan" was attached to a medical official serving the Interior Ministry and "Uihak Subdokkwan" to another serving the Protocol Ministry. In the year 1419, a court-sponsored qualifying examination was given to candidates applying to become physicians.

Medicine in this period was generally regarded as a technique rather than a science and thus scarcely survived but for the support from the court. Lack of measures to promote medicine as a science resulted in the overall stagnation in the study of medicine.

The position of a physician was also a precarious one. At times when the result of a treatment for the king or a high ranking official was favorable, the physician was awarded with a prize. However, when the outcome of the treatment was not favorable, the physician would be expelled into exile or faced with personal persecution.

5. Period Beginning at the End of the 19th Century

As Yi Dynasty Korea made commercial pacts with the

United States and European countries, foreign diplomatic missions began to visit this country and set up their offices. With the establishment of diplomatic relations, missionaries came into Korea to spread Christianity. Recognition by the Korean people of western medicine increased with the arrival of missionary doctors. In 1885 or the 22nd Year of King Kojong, a royal hospital, "House of Extended Grace" (Chejung-won) was opened in Seoul and an American missionary, H. N. Allen, became the first superintendent of the hospital. This was the first modernized hospital in Korea, which was to begin an epoch in the history of the transition of the medical care system.

The year 1894 (the 31st Year of King Kojong) saw an extensive reform in political, cultural and social systems and it undoubtedly invaded such fields as medical care and medical education, which swere examined from the standpoint of the western medicine of modern times. Within the government, medical adminstration was consigned to the Bureau of Hygiene under the Ministry of Home Affairs. The Bureau was responsible for preventing epidemics and for the operation of the royal hospital, "Chejung-won." Vaccination against small-pox was one of the essential missions of the Bureau.

Later, affairs related to hygiene were taken over by the Police Office (Kyungmu-chung), which assumed responsibility in the prevention of communicable diseases, disinfection, quarantine, smallpox vaccination, food and drinking water, medicine and pharmaceutics, livestock slaughter houses and cemeteries.

With the cabinet reshuffle in 1885 and the subsequent internal reform of the government, the Bureau of Hygiene was made independent. There were two sections in the Bureau, one the Hygiene Section, the other the Medical Affairs Section. Such functions as the prevention of communicable diseases, vaccination, quarantine and "stopping inbound ships" belonged to the Hygiene Section, while the Medical Affairs Section looked after works related to physicians and pharmacists, patent registration of drugs and local hospitals.

In 1909 a hygiene laboratory was set up as a section of the

Bureau of Hygiene and it manufactured vaccines and Ringer's solution, examined microbes and inspected the chemical quality of tablewares.

The health-related ordinances made public by the Government between 1895 and 1900 regulated inoculation, medical inspections, and measures for the prevention of cholera, typhoid fever, dysentery, typhus and small pox.

At this time, the major medical care facilities were Chejung-Won, the royal hospital, Daihan Uiwon (Hospital), Chaheuiwon, Soonwhauiwon and the Korea (Daihan) Red Cross Hospital.

6. Chejung-Won

The financial slump which plagued the government following the Sino-Japanese War in 1894 and the subsequent Kabo Political Reform gradully subverted the operation of this royal hospital. Its administration was taken over by the Northern Presbyterian mission (from the U. S. A.). Thus, the relationship of the Chejung-Won with the royal house was broken off. With the construction of a new building in Septmeber 1904, it was newly named the "Severance Hospital."

7. The Ministry of Interior Hospital

Established in April 1900 as a hospital under the direct control of the Interior Ministry, the hospital treated prisoners and patients with communicable diseases.

8. The Kwangje-Won

The Ministry of Interior Hospital was renamed the Kwangje-Won in 1901. This hospital took care of prisoners and inspected the health of prostitutes. The Hospital practiced both western and Chinese medicine. Among its employees were pharmacists and doctors specializing in small-pox vaccination.

9. The Daihan Hospital

Established in March 1907 under Uijongbu (Political Affairs Council), this hospital inherited the duties of the Kwangje-Won. With new Departments of Education and Hygiene augmented, the Hospital assumed two important functions; health education and medical care, following the newly developed concept of modern western medicine. Then the laboratory of Hygiene was spearated from the Daihan Hospital and attached to the Bureau of Hygiene of the Interior Ministry, and instead, a medical school was founded under the Hospital. The Daihan Medical School trained physicians, pharmacists, midwives and nurses.

The Daihan Hospital became the Seoul National University Hospital of today, when the attached medical school grew to be the School of Medicine, Seoul National University.

10. The Chahe Uiwon (Mercy Hospitals)

The Chahe Uiwon or the Mercy Hospitals were established under the Interior Ministry in 1909 to cure indigent patients. Located in every small city across the country they were the first of today's municipal and provincial hospitals.

11. The Soonhwa Hospital

Built in 1909 for the purpose of isolating cholera patients, it grew into the Chungboo Metropolitan Hospital of Seoul today. It mainly accommodated and treated patients with communicable diseases.

12. The Red Cross Hospital of Korea

The Red Cross movement was begun in 1913 in Korea. The Red Cros Hospital was established in Seoul in 1915.

13. Court Physicians

Unitl the year 1907, medical care in the court heavily depended on herb doctors practicing Chinese medicine. But after the establishement of the royal hospital by Dr. Allen, both the Chinese and western medicine became equally popular as some foreign physicians frequented the court.

14. Medical Education

There were two institutions teaching medicine, the Government school and the Severance Medical School. The Government school, founded in 1900 adopted a 3-year system and produced its first 19 graduates in 1904. This medical school educated students to be pharmacists, midwives, nurses and physicians, and published some text-books. The Government medical school has grown to be the Seoul National University School of Medicine.

The Severance Medical School originally founded in the name of Chejung-won Medical School in 1886, managed to regularize medical education in the year 1899. Then Dr. O.R. Avision, Dr. Allen's immediate successor set about building a new hospital in front of the Seoul Railway Station with the funds donated by Dr. Severance, an American. The Severance Hospital was dedicated by Dr. Allen at the completion of the building in 1904. The Serverance Medical School graduated its first 8 physicians in 1908. This School grew to be the Yonsei University College of Medicine.

15. The System of Medical Care Under the Japanese Regime

During the 36 years of Japanese occupation in Korea, which started in 1909 and ended in 1945 with the end of World War II,

the system of medical care as well as medical education in Korea came under two influences simultaneoulsy; those of the German system and the American systems. The Japanese had sent their students to Germany and the Japanese system of medical care and medical education were much in line with those in Germany. The American concept of medical care and education was first introduced into Korea by the missionaries.

The functions relative to health and medical administration during the earlier period of Japanese occupation were placed within the Hygiene Section under the Inspector-General of Police Affairs, which formerly had belonged to the Bureau of Hygiene of The Ministry of Interior. Here, the administration of the Diahan Hospital and the Mercy Hospitals were turned over to their respective successors; the Hospital of the Government General of Chosun (Korea) and the Local Affairs Bureau of the Ministry of the Interior. Such functions as the medical inspection of inbound boats and the quarantine of exported Korean cows also belonged to the police.

Medical practitioners of those days could be categorized into two major groups; the "physicians" who were trained in western (modern) medicine and the Chinese or herb doctors. The "physicians" were again classified into "doctors," "limited doctors" (who were authorized to practice only within an area designated by the government), and dentists.

The "physicians" were the graduates from either the medical college of a university or a "professional" school of medicine. Those without formal schooling who passed government-sponsored qualifying examinations were also given the status of "physician" and were permitted to practice. Similar provisions were made for dentists' qualifications, and there were special provisions for qualifying the herb doctors practicing traditional Chinese medicine, with a view to preserving it as it had proven to be of practical service to medical care in Korea for thousands of years.

16. Auxilliary Functions

Laws and regulations providing for nursing and midwifery were first enacted in the year 1914. To be a nurse required one and a half year's training, while a midwife could practice after 18 months training. It was also in 1914 that regulations governing such auxiliary functions as massage, acupuncture and bone-setting were enacted.

Among the dealers of drugs and medical substances, those who wished to be pharmacists had to complete the pharmacology course of a medical college or to graduate from the "professional" school of pharmacists, or to pass the qualifying examination given by the government.

17. Measures for Prevention of Communicable Diseases

Korea, geographically located between Japan and China, was frequently attacked by epidemic diseases that were regarded to have originated outside Korea. Armed with new concepts and know-how on epidemic disease which were brought about with the introduction of modern medicine, necessary laws and re-regulations were enacted. Records indicate that administrative measures were strict in the prevention and eradication of communicable diseases.

The ordinances made public in 1915 defined and listed nine epidemic diseases, as follows: Cholera, typhoid fever, dysentery, paratyphoid, small pox, typhus, scarlet fever, diphtheria and pest (plague).

When an epidemic disease threatened to spread or showed any sign of prevalence, an agent of the government, as stipulated in the Communicable Disease Prevention Law, inspected in-and out-bound boats, trains, cars and pedestrians. Cleaning of living environment and dusting or fumigation with disinfectants were emphasized.

18. System of Medical Care Since 1945(Liberation)

This stage of medical development in Korea may be discussed in two phases; public health and medical care.

Public Health

Under the U. S. Military Government which was established immediately after World War II, systems pertaining to health administration underwent frequent changes; the central government organ responsible for public health administration was first called the Hygiene Bureau, which was later reorganized into the Health and Welfare Bureau. The function of health administration was then consolidated in 1946 into the Department of Health and Welfare at the ministerial level. Within the Department were 13 bureaus: hygiene, preventive medicine, medical care, veterinary medicine, pharmacy, relief, women and children, etc. Each city and province had within its scheme a Bureau of Health and Welfare, which again was broken down into such functions as medical administration, preventive medicine, hygiene, veterinary medicine, drugs and relief, etc.

With the establishment of the Government of The Republic of Korea on August 15, 1948, public health administration fell under the Health Bureau, which was a division of the Department of Social Affairs. It was in March 1949 that the Department of Health became independent as a ministerial level organization.

The merging and separation of the government functions and health and social affairs were repeated for some time until February 1955, with the amendment of the law concerning governmental machinery, when the decision was made to establish the Ministry of Health and Social Affairs.

Thus, the initial activities of the Ministry were the enforcement of laws pertaining to medical care, prevention of communicable diseases, quarantine at sea and air ports, food hygiene, pharmaceutical affairs, prevention of tuberculosis, prevention of public nuisance, medical insurance, narcotics and pre-

vention of parasitic diseases.

The expansion and intensification of the health network and services has been a subject of continued attention by the health authorities since the establishment of the Republic. From 1955, with an eye to providing the doctorless areas with adequate medical care, a health center was placed in every country and small city. Public health was the sole function given to the health centers in the urban areas, while the rural centers were given the dual functions of medical care and preventive services.

As the law provides, municipal and provincial hospitals are to support the work of health centers and the "public doctors" practicing in remote areas. The Nationl Medical Center, on the other hand, was given a special mission of providing the patients with highly specialized medical care.

Medical Care

In spite of the policy of the government to meet the medical needs of all areas, concentration of the physicians in the urban areas and meager budgetary resources still leave 44 per cent of the nation's 1,500 townships doctorless. Building and providing more equipment to health centers, and to national and public hospitals still remain a major task of our health and medical care administration.

In terms of the system of medical care, job classification of medical and paramedical personnel today is much similar to that instituted near the close of the 19th Century; physicians, dentists, herb doctors, midwives, nurses and apothecaries are still in practice. The physician who graduated from a medical college and has passed the state examination is handed a license to practice, as is the dentist and the herb doctor.

For nurses there are teaching institutions of different levels; nursing schools at the high school level and recently, nursing departments of most of the leading universities of the nation.

In addition to the above core personnel in medical care, there are licensed clinical pathologists, X-ray technicians, physical therapists, dental technicians, hygienic laboratory technicians,

nurse aids, sanitary assistants, and so forth. Besides, there are such quasi-medics as bone setters, and acupuncturers and shampooers.

19. The Board-Certified Specialists

The system of producing board-certified specialists was insituted in 1952. Specialists boards are organized in 17 different fields; internal medicine, surgery, pediatrics, obstetrics-gynecology, ophthalmology, oto-pharyngo-laryngology, urology, dermatology, orthopedic surgery, radiology, anesthesiology, psychiatry, neuro-surgery, pathology, preventive medicine, and tuberculosis. The basic requirment for a specialist includes a one year internship and 3 to 4 years of residency at designated educational hospitals plus qualifying examinations given by the state.

II. THE KOREAN MEDICAL ASSOCIATION, ITS HISTORY AND ACTIVIES

1. The Dawning Period

The Korean Medical Association, endowed with the mission of contributing to the improvement of the national health and providing the nation's 14,000 doctors with up-to-date medical information, was organized in 1908. Not more than ten physicians who were practicing in Seoul held a general meeting under the title, "The Medical Affairs Research Society" on Novemeber 6, 1908, and elected officers. Then, this first assembly of Korean doctors that now is the KMA set out to study the modern medicine of the west. Another society was organized on January 10 by the Japanese physicians residing in Seoul, in accordance with the Japanese colonial policy. They held a monthly symposium on the first Sunday of each month. The next year this group proposed that the government enact a law for qualifying physicians.

2. Period of Suffering

The appearance of the medical association of Japanese physicians and the annexation of Korea by Japan in 1910 paralyzed the function of the Daihan Medical Asoociation. To withstand the increasing oppression by the Japanese, a meeting of promoters for the establishment of the Chosun Medical Association was held on Febuary 21, 1930, at the Severance auditorium. This meeting was led by Yun, Il Sun and Leep, Kap Soo.

In September, the first general and inaugural meeting was held and a secretary, managers of general affairs, accountants and

editors were elected. Nine years after the outset the Association was disintegrated by the authorities. Afterwards, a meeting of the Chosun Medical Association took place twice, in 1942 and 1944, but their plan of medical research did not come to reality because they could not obtain the permission of the Japanese authorities.

3. Period of Advancement

With the Liberation of Korea in 1945, the nation's 400 physicians established a "permanent and nationwide" Physicains' Association in commemoration of the foundation of the Republic. The medical association which resumed functioning following the Liberation was merged into the Chosun Medical Research Society organized by professors of the medical colleges. Representatives from the above two groups came to terms on the issue of unification on December 9, 1945. Later an integrated general meeting held in the Soosong Primary School gave birth to the Chosun Medical Association and its leaders were elected. But the social and political unrest following the Liberation delayed the formation of a national organization. In March 1947 a preparatory committee for the establishment of a Central Council was first organized. On May 10 a general meeting of representatives was held, and at the same time the Chosun Medical Association which encompassed the area South of the 38th parellel came into being. On January 20, 1948 this organization was officially recognized as the Central Committee of Physicians in conformity with the National Medical Care Law then enacted and put into force. The physicians' meeting first authorized officially by the government consisted of a symposium on a national scale in January 1948. It was decided to publish a periodical and thereby cleanly outline the missions of the Association. But at the outbreak of the Korean War the Association moved in exile to Pusan, the temporary capital, and its regular functions were much attenuated. Returning to Seoul in October 1954, the organization obtained the approval of the authorities to become a body corporate, thus paving the way for future growth.

In March 1961, the association moved to a new office donated by member physicians across the country. Temporarily disfunctioned by the May 1961 Revolution, its former key members formed the Reconstruction Committee for the Medical Association in August of the same year, and the Medical Association was reorganized in a temporary general meeting held on Sept. 2, 1961. Then it moved to a new building constructed in the Chongro-Gu (District) of Seoul City. But with the gradual increase in the work volume as well as in the capacity of the Committee itself, a larger building was needed. With funds donated by its members throughout the country, the Committee has decided to build a new Korean Medical Association Building by the Han River. By this time the Association had made such rapid progress in other fields of activity that it came to be recognized as one of the strongest medical organizations in the Region.

4. Membership and Organization

In the earlier stage, the Association had a rather frail organization and the managing staff was small in number. However, in 1930 the association was expanded into the larger "Chosun Physicians' Association." In 1939, immediately before the association was put to pieces by order of the Japanese authorities, steps had been taken to organize local branches on a regional basis. Just after Liberation, its staff consisted of a chairman and directors of four departments.

In December 1945 the association elected a new chairman and changed itself into a larger structure by electing a number of central and local staff. In 1947, when the Chosun Medical Association was born, it adopted the same presidency, vice-presdency and chief directorship as today. After Liberation the association put an entirely new face on its management by separating the executive from the legislative functions. During the unstable period from the inauguration to the year 1948 when the Republic of Korea Government was established, a systematic management could not be instituted and the names of chairmen presiding before

1947 cannot be found.

5. Major Activities

In 1908 there were only two educational institutions of medicine in the country; the medical school attached to the government-run Daihan Hospital which had already produced 5 classes of graduates and the medical school under the Severance Hospital which graduated its first students in May 1908. Since only a few physicians had studied western medicine or graduated from a Japanese school, the estimated number of precursors of the medical association members was no more than a hundred.

As the teaching institutions were augmented and increased in number and as those who studied medicine in Japan joined the association, its membership gradually grew. Thus, by 1945 the membership had reached about three thousand. This organization was officially approved as a body corporate by the National Health Law proclaimed and enforced in the year 1948 when the government was established. The Association, legally fortified and supported by thousands of members, made its steps forward in the enhancement of medical morals and the protection of medical rights. At present, there are eleven municipal and provincial groups of physicians and many other branches under the control of the Korean Medical Association.

6. Events

Though the Association survived the Japanese occupation as only a resistance group or a social gathering, immediately following the Liberation it prepared itself to be a spring board for the movement for raising the standard of medical morals and helping to improve the national health by participating in the formulations of medical policies on the part of the government.

From the very early stages, the Association held an annual symposium and in 1948 began to publish its own periodical to provide its members with up-to-date information on the latest

academic advances. In addition, a team representing the Association was sent to the government and proposed that the educational system of medicine be reformed. The financial support of its members has made it possible for the Association to build a new building and intensify the activities of the organization. The Korean Medical Politics Society, organized in April 1970, has exercised a strong influence on the legislature and the administration as well, by hindering the passage of the laws which are considered to trespass on the rights of physicians. In March 1970 it started publishing a bi-weekly, The KMA News, to furnish its members with ample spaces for free discussions and with articles on the latest development in medical affairs.

7. Relation to Foreign Medical Organizations

The KMA, making its debut by dispatching its representatives to the International Conference on Cancer Research held in St. Louis in December 1947, was admitted into the World Medical Association (WMA) in 1949 through the efforts of the then Chairman Yun, Il Sun. Since then, the Korean Medical Association has been closely tied with the medical associations and academic circles of more than thirty nations. In 1961 the KMA entered the CMAAO (the Conferation of Medical Associations of Asia and Oceania) and in 1971 the CMAAO's general assembly will be held in Seoul, Korea under the auspices of the Korean Medical Association. Meanwhile, in 1964 KMA joined hands with the Japanese Medical Association (JMA) and arrangements have been made to dispatch a team of observers to Japan every year.

8. Activities of the Various Departments

The General Meeting of Representatives

The KMA holds a regular general meeting once a year, and, may call an extraordinary general meeting when needed. This is the supreme voting organ, in which the presidents in charge of

executive work and the permanent directors are elected and budget and projects are also discussed. The general meeting which is composed of the representatives from municipal and provincial medical associations, branches of the organization of surgeons serving in the Armed Forces and different individual academic groups can be divided into three subcommittees; the Budget Planning Sub-Committee, the Sub-Committee for the Discussion of Agenda and the Subcommittee for Discussion of Platforms and Regulations of the Association.

The General Board of Directors

The board of directors is composed of a chairman, permanent directors and the representatives from the Army and each province. Its function is to establish general policies to discuss the matters to be submitted to the general meeting, and to stipulate the process of works as well as the projects assigned by the general meeting.

The Permanent Board of Directors

This Board manages the Association's property and decides what to do about project proposals, and investigates measures needed to implement plans. Responsibility for all the above affairs are divided by the directors of planning, finance, law-making, medicine and publication departments.

Newspaper Management Committee

This Committee takes charge of publishing the newspaper of the Medical Association, the "KMA News", which was first published on December 21, 1967. The members of the Committee are composed of directors of planning, publications, and finance. The Chairman of the Committee is directly involved in its management and ballots of its members governs the decision.

Medical Ethics Committee

As the membership of the Association increased, measures to bring immoral members to justice were needed. This Committee

deals mostly with the violators of the regulations of the Association and attempts to maintain a high standard of medical ethics by taking all possible preventive measures.

Committee for Medical Affairs

The main function of this Committee is to vindicate the legal rights of member physicians. The Committee is responsible for analyzing medical accidents scientifically, for handling disputes evolving medical treatment, and studying the medical care system, and for evaluating fees and wages.

The Medical Insurance Committee

This Committee studies the potentiality as well as adequacy of the medical insurance system.

Drugs and Food Committee

First organized in June 1965, the Committee devotes itself to the improvement of medical services by looking into the economic and social factors involved in medical care activities of the members. In addition, it is concerned with the improvement of medical services.

The Research Committee

The purpose of this Committee is to manage effectively the research activities promoted by the Medical Association, and to enlighten the populace with the latest health information.

The Publications Committee

This Committee takes care of such activities as editing and circulation of books and periodicals carrying medical information.

The Legislative Committee

The regulations as well as platforms of the Medical Association and measures for health administration are stipulated by the Committee.

The Hospitals and Clinics Trust Committee

This Committee is concerned with the management of the educational programs of the hospitals, and the training of interns and residents. Organized in 1963, it looked into the problems and programs of the teaching hospitals each year, but in 1967 as the work was transferred to the Korean Hospital Association, its activity was drastically reduced.

The Special Committees

There are some special committees; that is, the Health Committee in charge of educational broadcasting, and the Specialist Committee which studies and evaluates the effective management of the medical specialist system.

9. The Affiliated Organizations (Municipal and Provincial Medical Associations)

The Seoul Medical Association

History: The Seoul Medical Association was Set up in December 1915, in Hansung (Seoul) by 19 Korean physicians. The Hansung Medical Association was the forerunner of the present Seoul City Medical Association. However, during its initial stage, the appearance of a society organized by the Japanese constituted a serious hindering factor to its research activity, and worse, the Government-General of Chosun forced the Organization to join the Japanese Medical Association. After resistance that was repeated for some time, the Association was disintegrated. With Liberation the Seoul Medical Association was reorganized on December 21, 1945. In 1947, it joined the Korean Medical Association (KMA) as one of its legitimate member association and soon the rest of the local associations followed the example of the Seoul City Medical Association. The Seoul Medical Association survived the Korean War in Pusan in exile. Disassembled once by the May Revolution in 1961, it was soon reorganized with the guidance of the Supreme

Council for National Reconstruction led by General Park, Chung Hee.

Accomplishments: The Seoul Medical Association maintained the spirit of independence during the Japanese occupation and after Liberation took the lead in the formation of the nation's medical association. In April 1950 the association began to publish the Seoul Medical Weekly which now is published as a daily, the Korean Medical News.

Present Situation: The increase in the number of members of the Seoul Medical Association gave rise to branch associations and five special societies. In addition to presidents and representatives, all the affairs of the Association are shared by directors of planning, general affairs, finance and publication departments.

The Pusan Medical Society

History: The Pusan Medical Society was first established in October 1945, by a small number of physicians, the precursor of the Association once sent a representative to the inauguration of the Chosun Medical Association in 1940 and afterwards was absorbed into the provincial association in accordance with the "Local Administration Law." As Pusan City was elevated to the status of a special city under the direct control of the central government on November 24, 1962, it was seperated from the provincial association and became independent.

Accomplishments: Having secured a three-storied building in 1969, the Association holds a regular symposium annually and contributes to the dissemination of medical know-how among the members by publishing a periodical.

Present Situation: The membership of the Pusan City Medical Association has reached about 900. There are six district branches and one special branch representing the Medical College of Pusan University.

The Kyunggido Medical Association

History: Established in November 1944, the association was dissolved at the end of the Second World War. It was begun again in

May 1946, and was made independent of the Seoul Medical Association to which it had been subject. With an office building in Inchon, on August 30, 1961 it resumed its functions by holding a reconstruction meeting. On December 12, the Kyunggido Medical Association outlined its platform which is in effect now.
Accomplishments: The Kyunggido Provincial Association put its whole support into the drive for improving physicians' qualifications and the protection of medical rights. In particular, it played an important role in modulating the tax-strife in 1966 which became an exemplary case for the rest of the associations.
Present Situation: The Association consists of 660 members. There are twenty-two municipal and county branches under its influence.

The Kangwondo Medical Association

History: This small provincial association came into being with the first general meeting held in December 1946, by no more than 50 physicians including some Japanese. Following the reconstruction meeting in September 1961, it stipulated the regulations that are currently in force.
Accomplishments: Unlike the other associations, the Kangwondo Association successfully managed to give medical lectures at each regional unit. Considering the mountainous geographic feature of the province this was no mean feat. Moreover, the Association's clinical team makes a round of the doctorless areas at least four times every year, to provide medical care.
Present Situation: With nearly 300 members, the Association has 16 municipal and county branches.

The Choongchung Bukdo Medical Association

History: The association, which was organized on December 30, 1952, was officially approved by the governor of the province in Feburuary 1953, and held the first general meeting on October 19, 1953.
Accomplishments: From the very beginning it has given various medical services for the people in the Province and sponsored regular medical lectures for its members. The Association plays a

significant part in the protection of the rights and interests of its member physicians.
Present Situation: The Association has 160 members and embraces twelve municipal and county branches.

The Choongchung Namdo Medical Association

History: The Association held its inauguration meeting on April 25, 1946. On having adopted new regulations on August 27, 1961, it underwent a change in organization and in 1962 undertook construction of a new building. The members of the Association contributed for the expenses.
Accomplishments: The activities of the Association have so far been centered on the welfare of its members such as the negotiation with the tax authorities to relieve its members of heavy burdens, and standing for its members in asking the electric company for special power supplies to the clinics. The association holds seminars twice a year.
Present Situation: The Association has 17 municipal and county branches under its control, and the membership is over 400.

The Cholla Bukdo Medical Association

History: Though the Association, established in 1946 by a handful of physicians, was reformed to be a local branch under the direction of the KMA in 1963, it has gone by its original name. Since its inauguration, it adopted the "all-members-assembly system."
Accomplishments: The Association gives annual medical services to the doctorless villages in the province. In 1956 the Association in a successful protest movement blocked the entry of Chinese medicine into the Provincial Hospital which had been planned by the governor of the province. Furthermore, the annexation of the Kunsan Provincial Hospital with the "Kunsan Educational College" which was devised by the authorities was nipped in the bud by the efforts of the Association. Besides, it has spread warning against chlonorchis sinensis to the residents along the Mankyung River and enlightened the provincial people in communicable diseases and birth control measures. The Association is continually working on

improving the health of the people in the province.
Present Situation: The association has 16 municipal and county branches. The number of its members has reached 300 of whom presidents, managers, and directors of varying missions are elected.

The Cholla Namdo Medical Association

History: This association was originally set up by Japanese physicians in 1932. With the organization reshuffled in 1956, it passed new regulations and completed a network of municipal and county branches.
Accomplishments: The association showed no remarkable signs of activity until 1956 when it invited some scholars who had studied abroad to give medical lectures for its members. In addition, it lays out scholarship funds for medical students who are sons and daughters of its members. For the purpose of improving the health of the provincial people it conducts surveys on health in the area under its jurisdiction and makes medical service rounds for the doctorless islands far off the coast. Besides, the Association for the first time in Korea, instituted a Modulation Committee to be a go-between in the medical disputes among its members.
Present Situation: The Association with nearly 600 members has twenty-five municipal and county branches.

The Kyungsang Bukdo Medical Association

History: In 1943, a handful of Korean and Japanese physicians held an inauguration meeting in Taegu, but thereafter Koreans organized a separate "fraternity" which became today's medical association of the province. With Liberation in 1945, the association made a start again. After the May Revolution it adopted the regulations now in use and at the same time underwent a big change in organization.
Accomplishments: In cooperation with the government, the association has always taken the lead in improving the peoples health and in protecting the "medical right." That is, it proposed that the government revise the law for national medical service and health centers, that it check the medical care provided by unqualified

physicians, modify the medical system, manipulate licensure and taxation, and enact a law concerning the operation of blood banks.
Present Situation: The Association has 28 branches and nearly 900 members. At present it is in a large fund raising drive for the construction of a new building.

The Kyungsang Namdo Medical Association

History: Organized on May 16, 1947, as a social gathering, the association was separated from the Pusan Medical Association as Pusan was promoted to a special city to be placed under the direct control of the Government in 1962. It moved its office to Masan City, Kyungsang Namdo.
Accomplishments: Twice a year the association holds seminars and, as occasion calls, gives medical lectures. Particularly it has devoted much to the protection of the "medical right."
Present Situation: Its separation from the Pusan Medical Society reduced the number of members to less than half the original. Different duties are shared by respective directors as well as by a president and a chairman.

The Chejudo Medical Association

History: The Association was first established by a score of physicians and dentists by holding the first general meeting in 1947.
Accomplishments: A small number of members are so intimately working with others that they readily band together to accomplish work that is planned.
Present Situation: The Chejudo Medical Association sustains three branches and 60 members.

The Medical Association of the Republic of Korea Army

History: The method and procedure of medical care within the Army, Navy and Air Force was agreed upon in a joint meeting of Surgeon-generals of the Armed Forces held in May 1954 to arrive at an integrated plan of medical services. The need for a gathering of surgeons was officially approved by the Minister of Defense on June 20, 1954 and this was the start of the "Medical Society of

Surgeons.'' Later it was officially recognized as the military branch of the KMA and accordingly began to take part in the KMA's activity by sending its representatives to the General Meeting of the Association. With the department of medicine first installed within the Ministry of Defense, the activities of the offices of the Surgeon-Generals of the Army, Navy and Air Force came to be coordinated and thus intensified.

Accomplishments: It managed through mutual cooperation to put the confusing terminology of military medicine into uniformity and every year dispatches its representatives to the World Medical Association of the Armies in an effort to improve the medical technique of the army.

Present Situation: The Army sends nine representatives and three directors every year to the General Assembly of the Korean Medical Association. The appointment of the Chairman is subject to the decision of the Director of Medical Affairs Bureau, the Ministry of Defense. Once a year a symposium is held. The Armed Forces Branch of the Korean Medical Association contributed much to the national prestige by dispatching the Joint Medical Service Corps to Vietnam.

10. The Academic Societies of Special Fields, Affiliated with the Korean Medical Association

The Korean Association of Internal Medicine

Established as the Chosun Internal Medicine Society on December 23, 1945, the Society changed the original name in August 1948. The Society with the expanded membership of about 600 organized 7 local branches. It holds a symposium twice a year and publishes a monthly journal which is formally placed in a file of 'Index Medicus,' a medical reference magazine published by the National Medical Library of the United States of America.

The Korean Surgical Society

The Society established on May 10, 1947, decided to permit

entry by only board approved surgeons in 1962. With no less than one thousand members joining it, the Society adopted the system of presidency and directorship. In December 1958, it first published a yearly Journal of the Korean Surgery Society, but in 1961 this journal was issued twice a year and two more years later on a monthly basis.

The Korean Pediatrics Association

The Association which was first organized on October 6, 1945 sustains 800 members and every year holds a symposium. It publishes a journal each month. Further, the Society adopted a system of financing research programs of individual members and of prize awarding to support younger physicians in their studies. It contributed much to the management of child health by drawing the standard values of growth and development of Korean children and by recommending the "Table of Preventive Inoculation for Children."

The Korean Association of Obstetricians and Gynecologists

The Society set up in May 1947 as the Chosun Obstetrics and Gynecology Society, was renamed the Korean Association, of Obstetricians and Gynecologists on August 15, 1948.

In May 1966 it joined the International Association of Obstetrics and Gynecology and every year sends its representatives overseas to take part in the annual international conference of the international association. It has nearly 600 members and 12 branches under its control. The publication of the monthly "Journal of the Korean Association of Obstetricians and Gynecologists" which first came into being in 1958, continues.

The Korean Ophthalmological Society

The Korean Ophthalmological Society which made its start on November 1, 1947 was admitted into the International Ophthalmology Association in August 1966. Supported by 250 regular and semiqualified members it has 4 branches. The affairs of the Society are shared by a president and directors of general affairs,

of research, publication, and planning departments. The periodical, 'The Journal of the Korean Ophthalmological Society,' comes out twice a year. The Society designates the first of November each year as "Eye Day."

The Korean Dermatological Association

Set up in November 1945 as the Chosun Dermatology and Urology Society, it was separated from the Urology Association in June 20, 1954 and stood independent in the name of the Korean Dermatological Society. It has 3 branches under its wings and embraces 200 regular and semi-qualified members. Directors of research and finance departments under the control of the president are in charge of their respective affairs. The Society, publishing its own periodical twice a year, joined the International Dermatology Association in 1963.

The Korean Urological Association

The Society, organized on November 10, 1945 as the Cho un Dermatology and Urology Society, was separated from the Dermatology Society to go by the name of the Korean Urological Association on June 20, 1954. The Society with 3 branches and 250 members began in 1958 to publish its own journal twice a year.

The Korean Otorhinolaryngology Society

Established in 1947, the society was formally admitted into the International Otorhinolaryngology Association on October 24, 1966. Having 6 branches and 350 members under its wings, the Society holds a yearly symposium. In 1962 it adopted a prize-awarding system in an effort to encourage its members to pursue research work. In addition, it set the the 9th of September as the "Day of the Ears" to enlighten the people with the know-how about the health of the ears.

The Korean Radiation Medicine Society

The society was established in October 1945 by the physicians and technicians who had been members of the Chosun

Roentgen Association. After this, as the number of medical specialists in that field increased, the technicians organized a separate society of their own. The Society with 150 members takes municipal and provincial branches in each region under its control. In 1964 it began to publish an academic periodical.

The Korean Neuro-Psychiatric Association

The Association, which was organized on September 1, 1945, has 150 regular and semi-regular members and maintains two municipal branches in Taegu and Pusan. A President, a General Manager, and the Director of Research look after all the affairs of the Society. The periodical publication of the Society comes out twice a year. In 1963 the Society formally joined the International Psychiatry Association.

The Korean Orthopedic Association

The Association, which came into existence on May 26, 1956, has nearly 300 members including semi-regular members. The Association coordinates the activities of three branches. The President and the Director-General take charge of its affairs. The Society adopted a prize-awarding system in 1965 and in October 1966 began to publish an academic publication seasonally.

The Korean Neuro-Surgery Society

The Society, set up by 31 physicians on March 11, 1961, has now about 80 members. It is run by the Presidents and Directors of General Affairs, Research and Examination Departments. On August 22, 1965 the Society was formally admitted into the International Neuro-surgery Association as a regular member.

The Korean Anaesthesiology Society

The Society which was first established by only 6 physicians on November 10, 1956 joined the Korean Medical Association on February 25, 1957. The membership including semi-regular members is about 100. A President and directors of different

divisions are responsible for the affairs of the Society. The Society is a member of the World Anaesthesiology Association and of the Anaesthesiology Association for the Pacific Region, Asia and Australia.

The Korean Society of Gastroenterology

The Society, set up in October 15, 1961, joined the KMA on April 12, 1962. It maintains a total of 140 members including semi-regular members.

The Korean Circulatory Diseases Society

The Society which was organized in November 1957 by a dozen physicians now keeps 140 members and 2 branches. In 1960 it was admitted into the Pan-Pacific Region and Asia Cardiac Diseases Association and the International Heart Diseases Association. In 1959 it issued the 'Clinical Electrocardiography' and established a scholarship award system.

The Korean Society of Nuclear Medicine

The Society, first organized by 43 physicians on December 28, 1961, joined the KMA on August 17, 1962. It has 150 members. The President and Directors of general affairs and research sections are responsible for all the affairs of the Society. In 1962 it began to publish a biannual academic periodical.

The Korean Communicable Diseases Society

The Society which was organized on November 11, 1961 has 110 members.

The Korean Hematology Society

The Society first set up on June 16, 1958 entered the KMA on May 15, 1960. It has 60 members and a managing staff. The Society was admitted into the Asian Hematology Society and in 1966 set about publishing a biannual academic journal.

The Korean Academy of Tuberculosis

The Academy made its start as a research department of the

Korean Tuberculosis Association on November 6, 1953. On October 15, 1961 it stood independent as the Korean Academy of Tuberculosis which later entered the KMA. The Academy with 350 members sends its representatives every year to the International Tuberculosis Society and publishes the "Tuberculosis and Respiratory Diseases" on a seasonal basis.

The Korean Chemotherapy Society

The Society which was first organized on June 16, 1958 maintains 150 members and 3 branches.

The Korean Leprosy Society

The Society, set up on August 12, 1958, has 180 members. Every year it gives awards to those who wrote distinguished theses, and in 1962 began to publish an academic journal.

The Korean Anatomy Society

The Society which was first instituted as the Chosun Anatomy Society on October 20, 1947 was renamed the Korean Anatomy Society in October 1949. The Society with 80 members holds an academic symposium every year.

The Korean Society of Pathology

The Society which was first organized in October 1946 expanded in 1961 and divided the organization into Department I (Anatomical Pathology) and Department II (Clinical Pathology). It has 60 members and issues an academic publication twice a year.

The Korean Society of Physiology

The Society which was first established in November 1946 maintains no less than a hundred members and became a member of the International Physiology Society in September 1965.

The Korean Biochemistry Society

The Society organized on June 15, 1948 has about 50 regular members and every year holds a symposium.

The Korean Pharmacology Society

The Society which was first set up in May 1947 has 60 members and in 1965 began to publish a biannual academic journal.

The Korean Society for Parasitology

The Society which came into being on January 14, 1959 has 160 members. In 1961 the Society prepared an abstract of the literature on parasitology which had been published during the past 50 years. In 1963 it began to publish its own academic journal.

The Microbiological Society of Korea

The Society was established in 1946 and entered the KMA in 1947. There are about 100 members.

The Korean Medical History Society

The Society, first organized on April 30, 1947 was admitted into the KMA in October 1949. At the beginning it had 90 members, but now it maintains 40. On May 11, 1947, it held an exhibition of ancient medical references and other literature related to medical development.

The Korean Society for Preventive Medicine

The Society which made its start as the Korean Hygiene Society on October 12, 1957, and was renamed the Korean Preventive Medicine Society on July 9, 1962. It has more than 200 members. In 1959 it began to hold a symposium annually.

The Korean Constitutional Anthropology Society

Having been separated from the Korean Anatomy Society, the Society stood on its own feet on June 16, 1958. It has 70 members and every year holds a symposium.

III. THE DOCTORS

1. The Number of Physicians is on the Increase

The Registered number of licenced physicians in Korea, as of 1967, was 12,269 in total; out of the total 11,223 were graduates from medical colleges, 601 were physicians who passed the state examination and 445 were limited physicians, as shown in Table III-1.

During the 10 year period from 1957 to 1967, physicians increased in number at an annual rate of 6%. This can easily be compared with the rate of natural increase in population for 1967, which is estimated at 2%. So far the increase in the number of physicians is known to be outrunning the size of the total population. In the years to come, it is expected that the production of licensed physicians will be sped up to catch up with the rising demand for public health and medical care. Table III-2 compares the past trend of increase in the number of physicians with that of population.

2. Characteristics of Physicians

Based on the case analyses of regular registration in 1967, the following characteristics of licensed physicians were obtained.

Age Distribution

Of the total 7,828 physicians who have registered with the Government about 63% were found to be in their 30s and 40s. Only 21 per cent were those under 29 and only 5 per cent were over 60 years of age, as seen in Table III-3.

Table III-1. Registered Number of Licensed Physicians

Year	Total			Physicians									Limited physicians		
				Total			Graduated from medical college			Passed the state examination					
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1956	6,436	5,776	660	5,723	5,068	655	4,459	3,846	613	1,264	1,222	42	713	708	5
1957	6,782	6,069	713	6,068	5,360	708	4,792	4,126	666	1,276	1,234	42	714	709	5
1958	7,125	6,343	782	6,405	5,628	777	5,107	4,372	735	1,298	1,256	42	720	715	5
1959	7,322	6,454	868	6,614	5,751	863	5,337	4,516	821	1,277	1,235	42	708	703	5
1960	7,765	6,780	985	7,064	6,084	980	5,780	4,843	937	1,284	1,241	43	701	696	5
1961	8,405	7,223	1,182	7,704	6,527	1,117	6,414	5,280	1,134	1,290	1,247	43	701	696	5
1962	9,653	8,248	1,405	8,951	7,551	1,400	7,654	6,297	1,357	1,297	1,254	43	702	697	5
1963	9,052	7,644	1,408	8,649	7,245	1,404	8,058	6,665	1,393	591	580	11	403	399	4
1964	10,095	8,543	1,552	9,695	8,147	1,548	9,087	7,550	1,537	608	597	11	400	396	4
1965	10,854	9,186	1,668	10,464	8,800	1,664	9,849	8,169	1,653	615	604	11	390	386	4
1966	11,456	9,688	1,768	11,027	9,308	1,764	10,461	8,708	1,753	611	600	11	384	380	4
1967	12,269	10,382	1,887	11,824	9,951	1,873	11,223	9,361	1,862	601	590	11	445	431	14

Source: Ministry of Health and Social Affairs

Table III-2. Rates of Annual Increase of Physicians and Population

Year	Physician			Population
	Annual increase	Increase rate (%)		Natural increase rate (%)
1957	346	5.4		
1958	343	5.1	4.4	28.8
1959	197	2.8		
1960	443	6.1		
1961	640	8.2		
1962	1,248	14.8		
1963	− 601	− 6.2	6.9	28.4
1964	1,043	11.5		
1965	759	7.5		
1966	602	5.5		25.0
1967	813	7.1		24.0
Mean		5.9	2.0	

Table III-3. Age Distribution of Licensed Physicians (1967)

Age	Number	Per cent
–29	1,662	21.2
30–39	3,533	45.2
40–49	1,388	17.7
50–59	849	10.9
60–69	315	4.0
70 and more	81	1.0
Total	7,828	100.0

Table III-4. Sex Ratio of Registered Physicians

Year	Male	Female	Sex Ratio
1956	5,766	660	875
1957	6,069	713	851
1958	6,343	782	811
1959	6,454	868	744
1960	6,780	985	688
1961	7,223	1,182	611
1962	8,248	1,405	587
1963	7,644	1,408	543
1964	8,543	1,552	550
1965	9,186	1,668	551
1966	9,688	1,768	548
1967	10,382	1,887	550

Sex Ratio

In 1956, there were more than 8 times as many male

physicians as there were female doctors. This tendency appears to be changing. In 1967, there were about 5.5 male doctors to one female doctor, on account of a steady increase in the number of female students graduating from medical schools all over the country, as shown by Table III-4.

Employment

Physicians in private practice constituted 43 per cent, or the largest percentage and about 16 per cent were known to be in military service. Another 14 per cent were engaged in either government service, teaching or working for public organizations. Only 235 of the known 1,700 physicians serving overseas co-operated in the annual registration campaign. For details see Table III-5.

Table III-5. Distribution of Registered Physicians by Employment (1967)

Employment	Number	Per cent
Government service	535	6.8
School and public organization	522	6.7
Private hospital	654	8.4
Private practitioner	3,377	43.1
Overseas	235	3.0
Military service	1,235	15.8
Others	1,270	16.2
Total	7,828	100.0

3. Physicians Serving Overseas

The total number of graduates from medical colleges up to Februrary 1968 was estimated at 13,581. Of this total, 1,706 physicians who have graduated from various medical schools in the country are reported to be serving in positions overseas (Table III-6).

4. The Specialist

During the period from 1952 to 1967, a total of 3,225

Table III-6. Physicians Serving in Foreign Countries and Sojourners (1968, 2)

Medical School	U.S.A.	Japan	Jamaica Nigeria	Rep. of China Hongkong Malaysia	Thailand India Burma	Canada	Germany France	Vietnam Philip-pines	Uganda Brazil Tanza-nia	Sweden Denmark Australia Switzer-land Uruguay	Paraguay Samoa	Total
Total	1,462	20	12	33	4	56	29	41	28	17	4	1,706
Seoul	513	8	11	19	2	23	16	12	7	9	2	622
Yonsei	291	3	1	12	1	12	1	2	4	—	—	327
Woosuk	226	3	—	—	1	16	7	1	4	3	1	262
Catholic	69	—	—	—	—	—	—	1	3	1	—	74
Ewha	122	—	—	—	—	—	—	—	—	—	—	122
Kyeongbug	168	—	—	2	—	4	3	17	4	2	—	200
Jeonnam	48	5	—	—	—	1	1	8	4	1	1	69
Pusan	25	1	—	—	—	—	1	—	2	1	—	30

Source: Korean Medical Association

Table III-7. Specialists Board-Approved (1967)

Year	Total	Internal medicine	Surgery	Orthopedic surgery	Pediatrics	Obsterics and gynaecology	Ophthalmology	Otorhinolaryngology	Dermatology	Psychiatry	X-ray	Others*
Total	3,225	597	689	121	311	436	228	199	121	65	87	371
Seoul	1,659	314	312	65	170	233	115	86	68	29	47	220
Pusan	80	9	13	5	5	11	1	10	1	4	2	19
Gyeonggi	119	27	29	4	9	17	11	5	2	3	4	8
Kangwon	57	13	16	5	5	4	4	3	—	2	—	5
Chung-bug	53	7	21	2	3	9	2	2	2	—	1	4
Chung-nam	114	25	35	4	11	12	6	4	5	2	2	8
Jeon-bug	101	18	22	1	11	13	8	14	2	2	3	7
Jeon-nam	230	32	61	8	16	30	17	15	8	3	11	29
Gyeong-bug	438	82	90	19	31	63	36	31	13	9	10	54
Gyeong-nam	368	70	89	8	50	42	28	29	20	9	7	16
Jeju	6	—	1	—	—	2	—	—	—	2	—	1

Source: *Ministry of Health and Social Affairs*

* *Includes urology, anesthesiology, preventive medicine and pathology.*

physicians were approved by specialist boards: among them the largest in number was in surgery with 689, the second was in internal medicine with 597 and the third was in obstetrics and gynecology with 436. More than half of the specialists were residing in Seoul (Table III-7).

5. Concentration of Physicians in Urban Areas

Concentration of physicians in large cities is remarkable. Out of the total physicians, 32% were residing in Seoul and 7% in Pusan, as of 1966 (see Figure III-1 and Table III-8).

Table III-8. Status of Urbanization of Physicians and Population

Province	Physician		Population	
	Number	Per cent	Number	Per cent
Whole country	11,456	100.0	29,174,190	100.0
Seoul	3,638	31.7	3,794,959	13.0
Pusan	785	6.9	1,425,703	4.9
Gyeonggi	872	7.6	3,101,687	10.6
Kangwon	291	2.5	1,831,094	6.3
Chung-bug	341	3.0	1,549,288	5.3
Chung-nam	670	5.8	2,911,001	10.0
Jeon-bug	582	5.1	2,521,879	8.6
Jeon-nam	1,207	10.5	4,050,688	13.9
Gyeong-bug	1,750	15.3	4,475,243	15.3
Gyeong-nam	1,164	10.2	3,176,237	10.9
Jeju	123	1.1	336,411	1.2
Foreigner	33	0.3	—	—

Table III-9. Population per Physician

Year	Population (1,000)	Physician	Population per physician
1956	22,307	6,436	3,500
1957	22,949	6,782	3,400
1958	23,611	7,125	3,300
1959	24,291	7,322	3,300
1960	24,989	7,765	3,200
1961	25,200	8,405	3,100
1962	26,432	9,653	2,700
1963	27,184	9,052	3,000
1964	27,958	10,095	2,800
1965	28,670	10,854	2,600
1966	29,208	11,456	2,500
1967	30,067	12,269	2,500

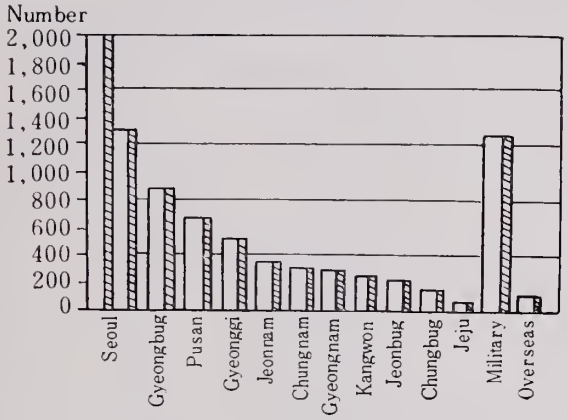

Fig. III-1. *Geographical Distribution of Physicians.*

Table III-10. Physician per 10,000 Population

Year	No. of physician	Physicians per 10,000 population
1956	6,436	3.1
1957	6,782	3.2
1958	7,125	3.3
1959	7,322	3.2
1960	7,765	3.1
1961	8,405	3.3
1962	9,653	3.7
1963	9,502	3.4
1964	10,095	3.6
1965	10,854	3.7
1966	11,456	3.9
1967	12,269	4.1

6. Population and Distribution of Physicians

In 1956, there were 3,500 people to be taken care of by one physician, but this ratio had dropped to 2,500 by 1967, owing to a steady increase in the number of students graduating from

medical colleges (Table III-9). In spite of the drastic increase in the absolute number of physicians, there remains a formidable gap in the population-doctor ratio by the urban and rural areas (Table III-11). In 1966, for instance, there were 1,043 population per physician in Seoul Special City, while each physician had to take care of a total of 6,292 in Kangwon Do Province.

Table III-11. Population per Physician by Province (1966)

Province	Population	No. of physician	Population per physician
Whole country	29,174,190	11,456	2,547
Seoul	3,794,959	3,638	1,043
Pusan	1,425,703	785	1,816
Gyeonggi	3,101,687	872	3,557
Kangwon	1,831,094	291	6,292
Chung-bug	1,549,288	341	4,543
Chung-nam	2,911,001	670	4,344
Jeon-bug	2,521,879	582	4,333
Jeon-nam	4,050,688	1,207	2,356
Gyeong-bug	4,475,243	1,750	2,557
Gyeong-nam	3,176,237	1,164	2,729
Jeju	336,411	123	3,470
Foreigners	—	33	—

7. Doctorless Areas

Out of the total 1,466 towns and townships, as of 1965, 649 or 44% were without any physicians. Of the whole population, 721 million were residing in these doctorless towns and townships. The highest proportion of doctorless population was observed in Cholla Namdo with 48% and the second in Cholla Bukdo with 44%. In 1966, 28% of total deaths of the country were certified by physicians. It is characteristic that a significant difference is observable in the proportion of deaths certified by qualified medical personnel, by province. The proportion was 78% in Seoul and 67% in Pusan, while it was 5% in Cholla Namdo and 6% in Jejudo (Table III-12).

Table III-12. Doctorless Area (1965)

Province	Number			Doctorless area		
	Ku. Shi	Gun	Eub. Myeon	No. of Eub Myeon	Population	Per cent
Whole country	45	139	1,466	649	7,503,267	26.2
Seoul	9	—	—	—	—	—
Pusan	6	—	—	—	—	—
Gyeonggi	3	19	194	53	423,616	14.2
Kangwon	4	15	105	36	313,085	17.7
Chung-bug	2	10	104	47	515,667	33.5
Chung-nam	2	15	179	38	843,975	29.1
Jeon-bug	3	13	162	99	1,126,754	44.8
Jeon-nam	4	21	231	150	1,920,047	47.8
Gycong-bug	5	24	251	99	1,117,580	24.9
Gyeong-nam	6	20	227	123	1,179,007	36.5
Jeju	1	2	13	4	63,536	19.5

IV. ACTIVITIES OF KOREAN MEDICAL PERSONNEL ABROAD

According to the data assembled by the Ministry of Health and Social Affairs, a total of 4,522 medical personnel are employed in foreign countries. By and large, the Korean medical personnel are recognized not only for their skills but also for their integrity. There are, according to statistics, 1,804 medical personnel in the United States and 2,229 in West Germany, while in Africa there are 76, in Japan 140, in Canada 125, in Vietnam 43, in Malaysia 50, and 54 in other countries.

1. The Doctors

The emigration of Korean doctors really began in 1964 when the government of Uganda, Africa invited a group of 15 physicians at a time on a contract basis. Before this, a number of Korean doctors had gone to the United States, Germany, Japan and England, in order to further their training and research. In 1965 Malaysia invited 40 physicians and in 1966 a group of 24 civilian physicians were dispatched to the war-devastated Vietnamese Republic. In the same year Malaysia called for an additional 5 physicians and Borneo invited a single physician under an individual contract. Following this, a number of doctors accepted invitations from abroad and are serving in various countries all over the world.

2. The Nurses

The nurses working in foreign countries, now totaling 2,867, increased rapidly in number after contracts were signed

with West Germany in 1966. These contracts resulted in requests from West Germany for 921 nurses in 1966 and 214 nurse-aids in 1969. At the moment, there are seventeen countries who employ Korean nurses or nurse-aids. There are additional offers for nurses or nurse-aids from numerous countries, but Korea could hardly meet the request from abroad because her domestic demand is on the increase. In fact, Korea has undertaken production of nurse-aids who are qualified after a short term training, to supplement the nursing need that is ever increasing.

3. The Other Medical Personnel

The latest information available indicates that there are a total of 79 Korean dentists and 30 pharmaceutists who are scattered in many countries such as Canada, America, Brazil, West Germany, Denmark, France, and Japan. Pharmaceutists, mostly women, accompany their husbands overseas.

4. Problems

The steady increase in the number of medical personnel seeking employment overseas has now started to create a shortage of medical personnel at home. The Government so far has maintained a policy to encourage emigration of medical personnel, primarily in consideration of the potentiality of their contributing to the economic development of their mother country. As time goes by, however, the rapid economic growth at home and increase in the total population, together with the limitations posed on the production of doctors, has made it imperative that the Government adjust its policy. There are a total of about 5,000 physicians in Korea at the ratio of 2,493 people to a single doctor. The growth of Korea's population will increase the demand of physicians in the years to come. In 1976, 20,000 doctors will be needed, in 1981, 26,000 and in 1986 about 32,000 physicians will be needed. To meet the growing need of physicians the government established a long-range plan to expand the existing medical schools and

medical school enrollment and at the same time put the movement overseas of doctors under strict control.

Now, a physician, if he is expected to go abroad, is permitted to do so only when he is through with required duty in doctorless areas. Now in Korea there are 13,506 nurses, with a ratio of 2,400 people to a single nurse. Many countries all over the world continue to extend invitations to Korean nurses. This poses a serious problem in terms of the domestic supply of trained nurses. Thus the government has set up plans to train 30,000 nurses or nurse aids by 1976, 49,000 by 1981 and 64,000 by 1986. This ambitious plan to train a large number of nurse-aids will hopefully meet the need of a multitude of public health and medical care programs at home.

V. MEDICAL EDUCATION

1. Liberation and the Korean War

Ever since the close of the Second World War when Korea regained her independence from Japan, she has made a rapid social and cultural progress. The conventional medical education of Korea which had followed the Japanese system came to have a systematic shake-up into the American style as the systems of politics, economy, society, culture and education underwent the American influence during the occupation by the United States Armed Forces. However, with the outbreak of the Korean War in 1950, the medical education of Korea was compelled to undergo a period of confusion and instability. It was only in the 1960s that it began to reorganize itself in seeking a regular system and stability.

2. Reforms

The four-year professional Medical School system adopted for a long time in Korea was abolished during the early years of United States military occupation. Instead, a six-year system was introduced and this included a two-year premedical course. In addition, as medical colleges and medical professional schools were annexed according to the "normalization plan" of college administration, the Medical College of the Kyung Sung University which succeeded the Kyung Sung Imperial University and the Kyung Sung Medical Professional School were merged to set up the single Medical College of the Seoul National University.

Furthermore, the Severance Medical Professional School,

the Kyung Sung Women's Medical Professional School, the Taegu and the Kwangju Medical Professional Schools were reorganized into six-year colleges. The Kyung Sung Dental Professional School was incorporated into the Seoul National University. Under these circumstances, most of the major universities gave birth to a medical college: the Ewha Women's University installed a medical college with Liberation in 1945, and the Taegu Medical College and the Kwangju Medical College became a component of the Kyung Buk National University and the Chun Nam National University, respectively, which were inaugurated in June, 1951.

3. New Medical Schools

In April 1953, the Pusan National University established a medical college and in May 1954, so did the Catholic University in Seoul. In 1957, the Severance Medical College became a part of the Yonsei University and the Kyungsung Women's Medical College was renamed the co-ed Sudo Medical College.

In 1959, in addition, the Dental College of the Seoul National University adopted a pre-dental course to institute a six-year course leading to graduation. Thus, in Seoul today there are several colleges of medicine with relatively long histories such as the medical colleges of Seoul, Yonsei, Woosuk, Catholic and Ewha Women's Universities. In addition to the above, in 1968, a new medical college was set up with Kyunghi University, in 1970 with Hanyang University and in 1971 with Chungang University, while the Kyungbuk Medical College, the Chunnam Medical College and the Pusan Medical College are the local medical schools with history and reputation. Then in 1970 the Chosun University and the Chungnam University were authorized to install a medical college and in 1971 the Medical College of the Chunbuk University was officially approved to receive students. Thus, there are 14 medical colleges in Korea today.

4. Current Status of Medical Schools

The 1970 survey by the Korean Medical Association disclosed the current status of the nation's medical colleges as follows:

The School of Medicine of the Seoul National University

Location: 28 Yunkun-dong, Chongro-gu, Seoul

Establishment: March 1899, Set up as the Kyungsung Medical School.

Teaching Staff:

	Basic courses	Clinical medicine
Professors	18	30
Associate professors	7	15
Assistant professors	8	23
Lecturers	7	16
	40	84
Total	124	

Students:

Freshmen	116
Sophomores	114
Juniors	110
Seniors	84
Total	424

* The number of freshmen and sophomores per teacher in basic courses; 5.7
* The number of freshmen and sophomores per teacher in basic courses; 5.7
* The number of juniors and seniors per teacher in clinical medicine; 2.3

Library: 26,312 volumes of books and 240 seats

Attached research institutes:

The Institute of Tropical Medicine
The Institute of Endemic Diseases
The Institute of Tuberculosis

The Institute for Cancer Studies

The Seoul National University Hospital:

Set up on September 24, 1889, the Hospital is equipped with 219 wardrooms and 486 beds. Also, it is departmentalized as follows: Internal medicine, surgery, chest surgery, neurosurgery, orthopedic surgery, obstetrics and gynecology, pediatrics, ophthalmology, otorhinolaryngology, dermatology, urology, psychiatry, radiology, clinical pathology, dentistry and anaesthesiology. With the completion in 1962 of the 13 story building which is now under construction, the capacity of the Hospital will grow to about 2,000 beds, with modern facilities and equipment to replace the old.

The Medical College of the Yonsei University

Location: 15 Sinchon-dong, Sudaemun-gu, Seoul

Establishment: April 1885, set up as the royal Chejungwon by H. N. Allen, a missionary of the Presbyterian Church of America who then served as a court physician.

Teaching Staff:

	Basic course	Clinical medicine
Professors	14	28
Associate professors	7	12
Assistant professors	2	14
Lecturers	15	27
	38	81
Total	119	

Students:	Freshmen	81
	Sophomores	89
	Juniors	69
	Seniors	70
	Total	309

* The number of freshmen and sophomores per tecaher

in basic medicine; 4.5

* The number of juniors and seniors per teacher in clinical medicine; 1.7

Library: 16,176 volumes of books, with 72 seats

Attached institutes:

Population and Family Planning Center
Institute of Sports Medicine
Institute of Public Health
Institute of Tropical Medicine
Institute of Disabled Children
Cancer Research Center

Severance Hospital:

Set up in 1885, equipped with 242 wards and 651 beds, the Severance Hospital is departmentalized as follows: Internal medicine, surgery, neuro-surgery, orthopedic surgery, psychiatry, obstetrics-gynecology, pediatrics, ophthalmology, otorhinolaryngology, dermatology, urology, chest medicine (tuberculosis), anaesthesiology radiology, plastic surgery, clinical pathology and dentistry.

The Medical College of Woosuk University

Location: 74 2nd St., Myungyun-dong, Chongro-gu, Seoul

Establishment: April 8, 1938, Kim, Chong Ik, the founder, organized the Woosuk Academy as a body corporate.

Teaching Staff:

	Basic course	Clinical medicine
Professors	8	18
Associate professors	5	5
Assistant professors	5	9
Lecturers	6	4
	24	36
Total	60	

Students

Freshmen	103
Sophomores	103
Juniors	139
Seniors	120
Total	465

* The number of freshmen and sophomores per teacher in basic courses; 8.6
* The number of juniors and seniors for a teacher in clinical medicine; 7.2

Library: 34,976 volumes of books, with 176 seats

Attached Research Institution:

Institute of Legal Medicine

The Attached Hospital: Established on September 1, 1941, it is equipped with 107 rooms and 286 beds. Departmentalization: General surgery, general internal medicine, chest medicine, internal medicine of digestive organs, orthopedic surgery, neuro-surgery, psychiatry, obstetrics-gynecology, pediatrics, otorhinolaryngology, ophthalmology, dermatology, urology, dentistry, clinical pathology, anaesthesiology and radiology.

The Medical College of Catholic University

Location: 89-4 Kyungwoon-dong, Chongro-gu, Seoul

Establishment: April 8, 1957, started as the Holy Spirit College attached to the Kyungsung Catholic Theology School.

Teaching Staff:

	Basic courses	Clinical medicine
Professors	11	25
Associate professors	8	11
Assistant professors	5	15
Lecturers	6	42
	30	93
Total	123	

Students:

Freshmen	83
Sophomores	83
Juniors	55
Seniors	75
Total	296

* The number of freshmen and sophomores per teacher in basic courses; 5.5
* The number of juniors and seniors per teacher in clinical medicine; 1.4

Library: 8,074 volumes and 120 seats

Attached Research Institutions:

Institute of Chronic Diseases
Institute of Clinical Medicine
Institute of Parasites

The Attached Hospital: Set up on May 11, 1936, it is equipped with 181 ward-rooms and 410 beds. The Catholic Hospital is departmentalized as follows: Internal medicine, surgery, chest surgery, pediatrics, obstetrics-gynecology, ophthalmology, dermatology, urology, otorhinolaryngology, radiology, psychiatry, orthopedic surgery, neuro-surgery, anaesthesiology, clinical pathology.

The Medical College of Ewha Women's University

Location: 1 Daehyun-dong, Sudaemun-gu, Seoul
Establishment: October 1945
Teaching Staff:

	Basic courses	Clinical medicine
Professors	6	13
Associate professors	3	5
Assistant professors	1	6
Lecturers	2	8
	12	32
Total	44	

Students:

Freshmen	47
Sophomores	51
Juniors	56
Seniors	56
Total	210

* The number of freshmen and sophomores per teacher in basic courses; 8.1
* The number of juniors and seniors per teacher in clinical medicine; 3.5

Library: 189,182 volumes of books and 938 seats.

The Attached Hospital; Set up on September 10, 1945 and equipped with 51 ward-rooms and 150 beds. The hospital is departmentalized as follows: Internal medicine, surgery, pediatrics, obstetrics-gynecology, ophthalmology, otorhinolaryngology, urology, dermatology, orthopedic surgery, radiology, anaesthesiology, neurosurgery, clinical pathology, and chest medicine.

The Medicial College of Kyungbuk University

Location: 335 Samduk-dong, Chung-gu, Taegu, Kyungbuk Province

Establishment: July 23, 1923, first installed in the Taegu Clinic as a privately-run medical institute.

Teaching Staff:

	Basic courses	Clinical medicine
Professors Associate professors	11	18
Assistant professors Lecturers	10	15
	21	33
Total	54	

Students:

Freshmen	91
Sophomores	86
Juniros	83
Seniros	70
Total	330

* The number of freshmen and sophomores per teacher in basic ourses; 8.4

* The number of juniors and seniors per teacher in clinical medicine; 4.6

Library: 9,517 volumes of books and 80 seats.

The Attached Hospital: Established in September 1910, equipped with 122 wardrooms and 250 beds. The hospital is departmentalized as follows: Internal medicine, general surgery, orthopedic surgery, neuro-surgery, pediatrics, obstetrics-gynecology, ophthalmology, otorhinolaryngology, dermatology, psychiatry, anaesthesiology, radiology, tuberculosis, clinical pathology, dentistry, radioisotope and chest surgery.

The Medical College of Chunnam University

Location: 8 In-dong, Kwanju, Chunnam

Establishment: September 26, 1910

Teaching Staff:

	Basic courses	Clinical medicine
Professors	8	13
Associate professors	4	8
Assistant professors	4	16
Lecturers	2	12
	18	49
Total	67	

Students:	Freshmen	75
	Sophomores	86
	Juniors	84
	Seniors	82
	Total	327

* The number of freshmen and sophomores per teacher in basic courses; 8.9
* The number of juniors and seniors per teacher in clinical medicine; 3.4

Library: 7,214 volumes of books and 94 seats.

The Attached Hospital: Set up on September 26, 1910, equipped with 300 wardrooms and 300 beds, the hospital has the following departments: Interna lmedicine concerned with the disorders of digestive organs, internal medicine concerned with the disorders of respiratory organs, internal medicine concerned with the disorders of circulatory system, surgery, orthopedic surgery, neuro-surgery, chest surgery, obstetrics-gynecology, pediatrics, anaesthesiology, dermatology, opthalmology, dentistry, psychiatry, radiology, clinical pathology and urology.

The Medical College of Pusan University

Location: 10 1st Street, Chunghyun-dong, Su-gu, Pusan
Establishment: 1955
Teaching Staff:

	Basic courses	Clinical medicine
Professors	1	10
Associate professors	5	6
Assistant professors	6	12
Lecturers	3	7
	15	35
Total	48	

Students:

Freshmen	81
Sophomores	81
Juniors	81
Seniors	79
Total	322

* The number of freshmen and sophomores per teacher

in basic courses: 10.8

* The number of juniors and seniors per teacher in clinical medicine: 4.8

Library: 4,228 volumes of books and 52 seats.

The Attached Hospital:, Established on November 1, 1956, equipped with 92 wardrooms and 218 beds, the hospital has the following departments: Internal medicine, urgery, orthopedic surgery, chest surgery, neurosurgery, obstetrics-gynecology, dermatology, urology, ophthalmology, otorhinolaryngology, pediatrics, psychiatry, dentistry, radiology, clinical pathology and anaesthesiology.

The Medical College of Kyunghi University

Location: 4 Whaeggi-dong San, Dongdaemun-gu, Seoul

Establishment: Februay 15, 1949, and in December 1965 officially recognized as the medical college, in 1966 began to enroll its first students.

Teaching Staff:

	Basic course	Clinical medicine
Professors	3	1
Associate professors	1	0
Assistant professors	0	0
Leturers	1	0
	5	1
Total	6	

Students: 74 (all freshmen)

The Medical College of Chosun University

Location: 375 Susuk-dong, Kwangju, Chunnam

Establishment: December 10, 1966

Teaching staff:

Professors	11
Associate professors	5
Lecturers	2
Total	18

Students: 74 (all freshmen)

In addition to those quoted above, there are relatively young institutions teaching medicine such as the Medical College of the Hanyang University, the Medical College of the Chungnam University, and the Medical College of the Chungang University.

The School of Public Health, Seoul National University

Founded in 1961, the School admits graduates from the medical and other colleges teaching science who apply for an M. P. H. degree. The School conducts a two year course, the first year being devoted primarily to class-room lectures on maternal and child health, family planning, health education, epidemiology, environmental health, and public health nursing, and the second year to field practices. The School has day and evening classes. The faculty consists of about 18 members. Recently, the China Medical Board of New York donated a new building to the School. Each year, the School produces from 40 to 60 graduates.

5. The Curricula of Medical Schools in Korea

The curriculum of individual medical colleges is, for the most part, organized in the similar pattern. With the advancement of medicine the curricula continue to undergo change, but there still remains much to be inproved. This need is attributable mainly to the fact that the Korean educational system of medicine has undergone the influence of three different systems, German, Japanese and American and that it has not yet reached the point of maturity. The curriculum revised in 1971 by the Medical School of the Seoul National University represents one of the efforts made by various universities towards a successful amalgamation of

the old and new concepts of curriculum organization. The new curriculum places more emphasis on laboratory work, preventative medicine and bedside teaching, than on the conventional didactic teaching which has heavily depended on classroom lectures.

6. Procedures for Qualification

A medical student who has completed the six-year course consisting of the premedical as well as the medical course is to be qualified as a bachelor of medicine, and to obtain the license of a doctor he has to pass the qualifying examination.

The subjects of the state examination are: Internal medicine, surgery, pediatrics, obstetrics-gynecology, ophthalmology, otorhinolaryngology, dermatology, urology, psychiatry, radiology, clinical pathology, preventive medicine and the regulations on medical affairs.

7. The Postgraduate Training

The post-graduate training course which a person qualified as a physician usually takes, in order to have research experience in respective field of major consists of two courses of different nature: One is the short-term refresher course given by the City and Provincial Medical Societies to practicing doctors, the other is the long-term post-graduate courses for the doctors applying for a master's degree, Ph.D. degree, or for a status of board-approved specialist.

The short-term education includes a minimum twenty hours of supplementary training which each of the municipal and provincial medical societies give every year, or the seven to ten day training that each of medical colleges presents.

The post-graduate education terminates in two to four years. The education for a medical specialist is carried out in the teaching hospitals designated by the Government. A graduate who has completed the five-year post-graduate training course including internship and residency and has passed the examination

will be approved as a specialist by the various specialty boards.

The specialty boards are organized in the following fields: Internal medicine, surgery, pediatrics, obstetrics-gynecology, ophthalmology, dermatology, urology, otorhinolaryngology, orthopedic surgery, radiology, anaesthetics, psychiatry, neurosurgery, pathology and preventive medicine.

8. Prospect

All over Korea, those concerned about medical education are increasingly aware of the necessity of improving the system of medical education to meet the changing need of the society. The simple imitation of foreign systems which was the pattern during the earlier days is to gradually give its place to the "Korean" system. In this way, the new medical profession will manage to keep pace with the technical achievement outside, and at the same time, will play its inherent role of contributing to the betterment of the social welfare of the country. To achieve this objective, the medical education will continue to modify its curriculum, and train and maintain a constant supply of its teaching staff.

VI. MEDICAL FACILITIES IN KOREA

1. The General Aspect

Medical facilities as specified by the Medical Care Act can be classified into:

General hospital, hospital, clinic, dental hospital, dental clinic, and herb clinic (practicing Chinese medicine).

In addition to the above, there exist the following auxiliary facilities: Dispensaries, sanatorium, midwives' offices, and health centers.

A Physician or a dentist must receive permission from the Mayor of Seoul City, Mayor of Pusan City or the Governor of the province for setting up practice. The Medical Act also permits establishment of non-profit medical facilities by non-professional persons, when approved by the Minister of Health and Social Affairs. Furthermore, the size and maintenance of facilities are also regulated by the Act. According to the provisions of the Act, for instance, private practice has the following rooms and compartments: Diagnosis room, ward, delivery room, operation room, emergency treatment room, clinical laboratory, and a pharmacy.

Also, the Act says, each private practice must be equipped with the following: Sterilizer, heating system, water supply system, cleaner and washing machine, fire alarm system, and a sewage disposal system.

The 1969 survey by the Ministry of Health and Social Affairs disclosed that a national total of 10,117 medical facilities could be broken down as follows:

Hospitals and clinics	5,392

Dental clinics	1,219
Herb houses	2,434
First aid rooms	117
Sanatoriums	11
Midwives' office	752
Health centers	192

According to the survey, the total number of hospitals and clinics together with general hospitals reached 5,392 as of the end of 1969, among which general hospitals numbered 12, "hospitals" 217, and clinics 5,163. In other words the total number of medical facilities rose in twenty years by 69 percent.

A general hospital must comprize at least the basically essential departments stipulated in the regulation of the Ministry of Health and Social Affairs, and it should maintain the minimum number of personnel provided by law. There are eight general hospitals in Korea which are under the major universities.

A hospital should be equipped with a sufficient number of qualified personnel and proper facilities as provided by government regulations. A recent survey reveals that an estimated 210 hospitals are operating in this country, which was doubled during the past ten years. Clinics alone equal 5,163 as of the end of 1963.

The minimum requirements of the number of personnel and the installations necessary for treatment in dental hospitals are also regulated. At the moment the Dental Hospital of the Seoul National University is the only dental hospital of the country. Dental clinics registered as of 1969 amount to 1,200 in number.

Herb clinics also increased to 2,400 by the end of 1969, which is twice as many as in 1955.

First aid rooms and dispensaries attached to business installations, schools, and industries number 117 throughout Korea.

A total of 8 sanatoriums exist for T. B. patients and lepers.

There are roughly 750 privately practicing midwives as of 1969.

A health center is stationed in each district (Gu) of large cities including Seoul, Pusan, Taegu and others, and at least one

in every county and small city. Its purpose is, of course, to put the health administration under effective control and to improve the national health.

2. The Distribution of Medical Facilities by Province

Of the registered 10,117 medical facilities throughout the country, approximately 38% (3,802) are closely packed in the Seoul area alone.

For providncial distribution of medical facilities, see Figure 1.

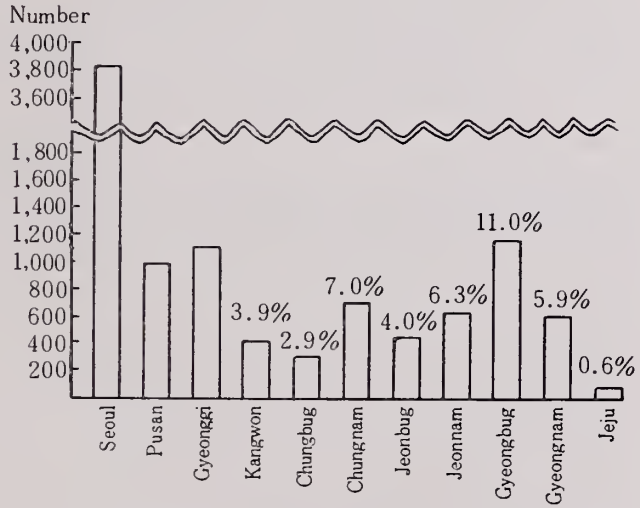

Figure 1. *The Provincial Distribution of Medical Facilities. (The 1969 Survey by the Ministry of Health and Social Affairs)*

From the above, the concentration of medical facilities in urban areas seems obvious.

There are a total of 5,400 hospitals and clinics, about 33 percent of which are located in Seoul. For provincial distribution of hospitals or clinics see Figure 2.

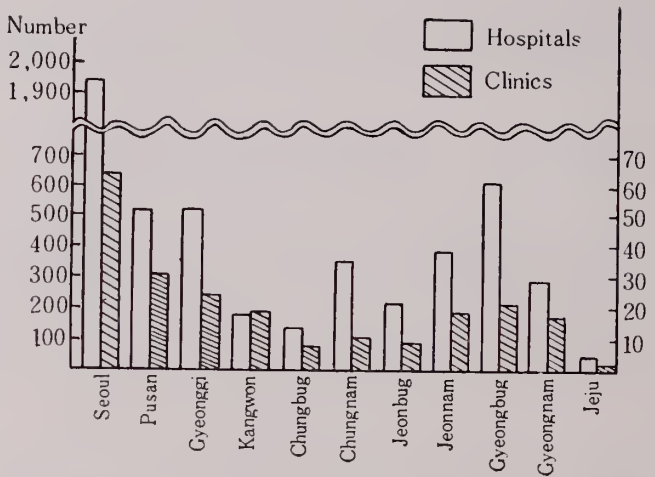

Figure 2. *The Distribution of Hospitals and Clinics by Province and the Major Cities.*

3. Dental Clinics

Nearly half of the nation's 1,200 dental clinics are located in Seoul (see Figure 3).

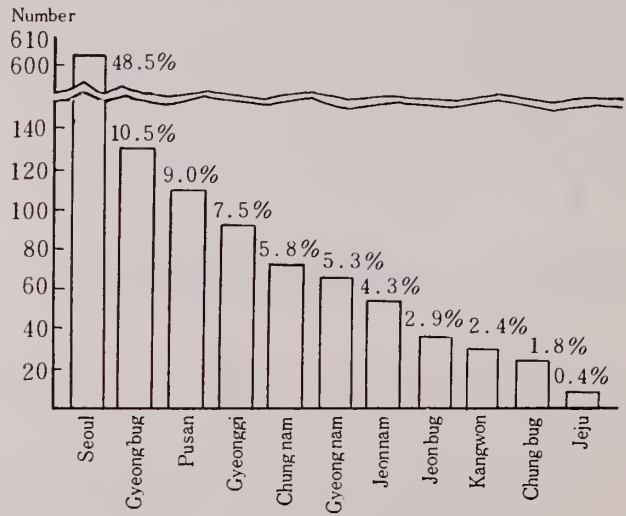

Figure 3. *The Distribution of Dental Clinics*

The number of herb clinics practicing Chinese medicine is shown by city and province is shown in Figure 4.

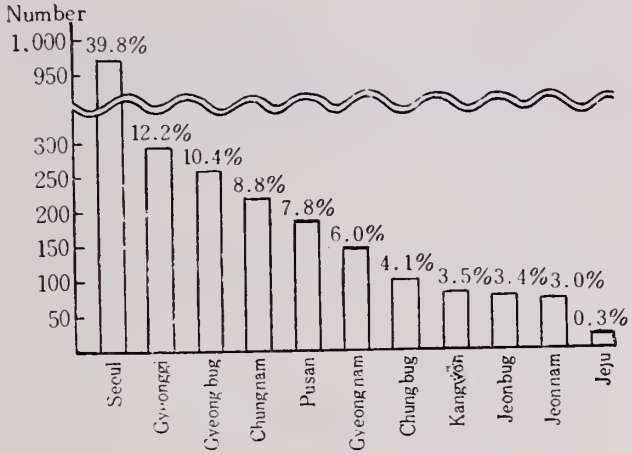

Figure 4. *The Distribution of Herb Clinics.*

4. Dispensaries

17 of the 44 treatment rooms annexed to business firms, schools, industries, and labor organizations are clustered in the capital city of Seoul as shown in Figure 5.

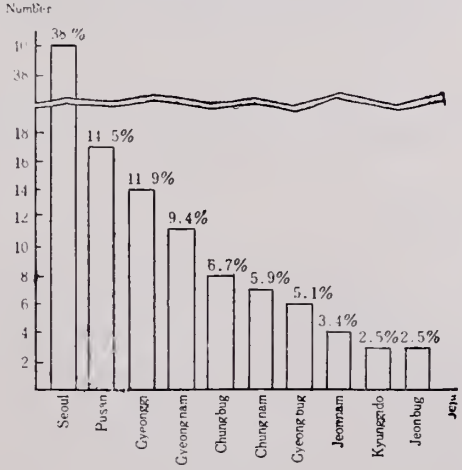

Figure 5. *The Distribution of First Aid Rooms and Dispensaries.*

5. Sanatoriums

There are no more than 11 sanatoriums in the country. Among these, eight are for the recuperation of T. B. patients and three for lepers. Some provinces hve no sanatorium.

6. Midwives Offices

Practicing midwives are scattered throughout the country, with a high concentration in urban areas, as in Figure 6.

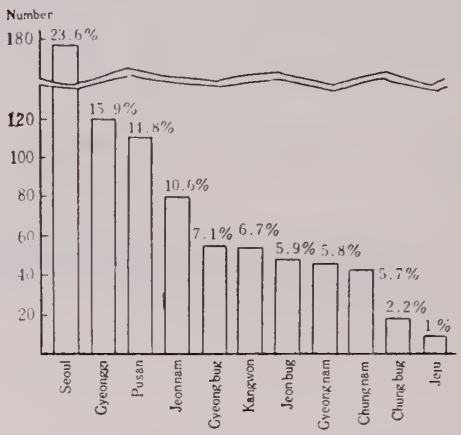

Figure 6. *The Number and Percent of Midwives in Each Province and Major City.*

7. Health Centers

While the medical care facilities are heavily distributed in the urban areas, as observed above, health centers are evenly scattered throughout the country. The major function of the urban health centers is to engage in public health activities, while that of the rural health centers is both preventive and curative services combined. Figure 7 illustrates the numerical distribution of health centers by city and province.

The functions of the health centers, both in the urban and rural areas, include providing the people with latest information on health, nutrition, guidance in oral and environmental hygiene, and prevention of both acute and chronic communicable diseases. Their added programs of importance in the recent years are those of family planning and controlling medical care facilities and other facilities concerning health and welfare in their respective area of jurisdiction.

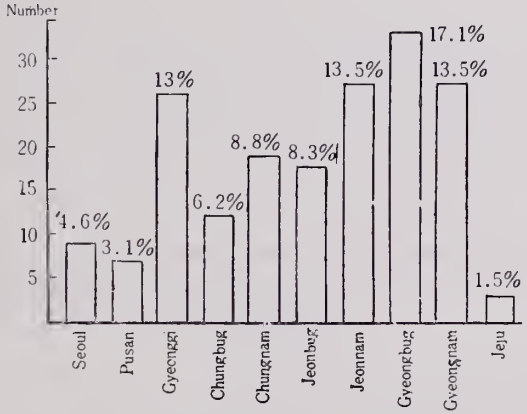

Figure 7. *Distribution of Health Centers.*

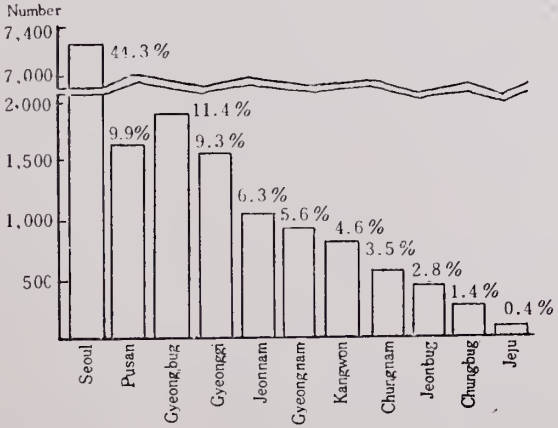

Figure 8. *The Distribution of Hospital Beds.*

8. Hospital Beds

A nationwide survey conducted by the Ministry of Health and Social Affairs in 1969 disclosed that there are a total of 16,270 hospital beds in the country, of which a daily average of 9,300 beds are occupied by patients. As shown in Figure 8, about 45 percent of the total bed capacity is distributed in the capital city, Seoul.

Hospital beds of general purpose comprise 77 percent of the total capacity, while those for T. B. and mental patients make up 14% and 6%, respectively, as shown in Table VI-1.

There are 1.5 beds in Seoul Special City per thousand people, while the ratio is 0.5 beds per thousand population in provinces.

Table VI-1. Bed Capacity Grouped by Use

Use	Number	Per cent
General	12,509	77
T. B.	2,285	14
Mental diseases	1,078	6
Communicable disease	398	2
Total	16,270	

VII. THE BOARD-CERTIFIED SPECIALIST SYSTEM

1. Background

It was in 1952 that the system of board-certified specialists, following the American pattern, was first introduced into Korea. According to the regulations, in order that a graduate of a medical school is to be approved as a specialist by the board he must finish the 5-year training including the internship and residency and pass the qualifying examination. The adoption of the specialist system originally developed to raise the standard of medical care at public institutions and private clinics has contributed much to the improvement of Korean medicine.

As the system was put into a more concrete shape, in 1957 the selection and approval of the training institutions came under the managment of this system. From 1960 on, only those who completed a certain period of training were permitted to take the qualifying examination.

In 1964, following a survey of the training hospitals, a "Regulation for Authorizing Educational Hospitals" was adopted and the Korean Medical Association took over the work concerning the enforcement of this Regulation. The task was later transferred to the Korean Hospital Association.

The specialist system of Korea has grown in relation to the standardization of hospitals. The special fields of medicine that are recently recognized in Korea are: internal medicine, surgery, radiology, obstetrics-gynecology, ophthalmology, otorhinolaryngology, urology, dermatology, orthopedic surgery, pediatrics, anaesthesiology, neuro-surgery, psychiatry, pathology (clinical and anatomical), preventive medicine and tuberculosis.

2. Current Status of Board-Certified Specialists

Board-certified specialists totaled 10 in 1952, but this figure has dramatically soared up to 30% of the total number of physicians as of the end of 1970. Detailed regulations were formulated to define the responsibility as well as privileges of the specialists. The Ordinance 77 of the Ministry of Health and Social Affairs based on the regulations of the Medical Care Law made public on May 7, 1962 stipulated in its Article 16 what the duties and rights of board-approved specialists were.

On September 12, 1966 tuberculosis and preventive medicine were additionally approved as specialty subjects and on June 1, 1969, decisions were made to separate the subject of dermatology from urology.

The data collected by the Korean Medical Association as of the end of 1970 shows that there is a total of 3,150 (male: 2,804, female: 346) specialists, comprising about 31% of the total number of 10,231 physicians (Table VII-1 and VII-2).

What is noteworthy is that the large number of specialists are serving in educational institutions or public hospitals and some

Table VII-1. The Number of Specialists by Field

Field	Number	Per cent
Surgery	656	20.8%
Internal medicine	521	17.7
Orthopedic surgery	119	3.8
Neuro-surgery	54	1.7
Pediatrics	331	10.5
Obstetrics-gynecology	477	15.2
Ophthalmology	154	4.9
Otorhinolaryngology	218	6.9
Dermatology	53	1.7
Urology	62	2
Psychiatry	86	2.7
Radiology	88	2.8
Anaesthetics	45	1.4
Pathology	57	1.8
Preventive medicine	112	3.8
Tuberculosis	56	1.8

Table VII-2. The Distribution of Specialists by Province

Province	Number (M:male, F:female)	Per cent
Seoul	1,440 (M: 1,714 F: 266)	45.7
Pusan	357 (M: 327 F: 30)	11.3
Kyunggido	163 (M: 151 F: 30)	5.2
Kangwondo	56 (M: 55 F: 30)	1.8
Chungchungbukdo	40 (M: 39 F: 1)	1.3
Chungchungnamdo	95 (M: 92 F: 3)	3
Kyungsangbukdo	112 (M: 96 F: 16)	3.5
Kyungsangnamdo	185 (M: 184 F: 1)	5.9
Chollabukdo	273 (M: 271 F: 2)	8.7
Chollanamdo	82 (M: 74 F: 8)	2.6
Chejudo	8 (M: 7 F: 1)	0.2
The Army	299	9.5
Foreign lands	40 (M: 35 F: 5)	—

540 of the medical graduates are enrolled in training hospitals to become specialists. As of 1971 there are 43 hospitals authorized for giving internship training and 65 hospitals operating on the system of residency training. For details see Table VII-3 and VII-4.

Thus, the total number of physicians who were receiving

Table VII-3. Institutions Giving Internship Training

	Number	The Number of Interns
University hospitals	8	233
National and public hospitals	12	87
Hospitals under government-run industries	2	28
Missionary hospitals	13	113
Private hospitals	3	28
Military hospitals	5	55

Table VII-4. Hospitals Giving Residency Training

	Number	The Number of Residents
University hospitals	8	826
National and public hospitals	15	246
Hospitals under government-run industries		
Missionary hospitals	14	260
Private hospitals	6	99
Military hospitals	6	201

either internship or residency training reached 2,261 as of 1971, 554 of these are interns and 1,717 residents.

3. Efforts for Upgrading Clinical and Professional Training

In the most recent years the Korean Hospital Association has been dealing with the matters related to the qualification and post graduate clinical training of physicians at various hospitals. Every year the Association conducts surveys on postgraduate clinical training and evaluates the conditions with regard to the qualifications.

The Hospital Trust Committee, which is composed of the representatives of the Korean Medical Association, the Korean Hospital Association and the Military Medical Association and individual societies, has responsibility for 1) the standardization of hospitals, 2) the surveys of training hospitals and 3) the post-graduate clinical training of physicians.

Another important mission of the Committee is to review the facilities, equipment and supply of trainers at various training hospitals and establish a long term plan for demand and supply of medical manpower.

4. The Regulations

Recently the government began to reveiw the regulations concerning the post-graduate clinical training of physicians with a view to adjusting the "Specialist System" now in effect, which has been for the most part an imitiation of the American system. The new regulations on the clinical training of physicians submitted to the Ministry of Health and Social Affairs by the Hospital Trust Committee and the Korean Hospital Association, made it manifest that the training period for the interns should be one year or less and that of the residents four years.

Hospitals for training interns, according to the new regulation, must 1) be equipped with facilities for training in

internal medicine, surgery, pediatrics, obstetrics-gynecology, anaesthesiology, radiology and clinical pathology, 2) be maintaining a capacity of more than 80 beds, 3) have no less than 1,600 patients admitted in a year and 4) be equipped with modern facilities for accommodating and feeding the patients, and have a record keeping system well established. The hospitals for training residents must be 1) the university hospitals, 2) the medical institutions which are authororized by the Minister of Health and Social Affairs and 3) the special hospitals under the Ministry of Defense. The regulation also limits the regular number of interns and residents to be recruited. The above proposed regulation is expected to go into effect as a governmental ordinance, after a careful review by the representatives of the Korean Medical Association, the Korean Hospital Association and the respective academic societies.

5. Standard for Allocating Intern Positions to Each Training Hospital

In standardizing the number of interns to be admitted into each training hospital for rotating internships, according to the new plan, the following factors should be taken into account: The owner of the hospital, number of hospital beds, and the rate of occupancy, number of autopsies, number of patients visiting the outpatient department, number of patients visiting the emergency room, and fatality after hospitalization. It is stipulated that a minimum of 10-25 in-patients should be allocated per intern, but not to exceed more than 25 patients with chronic ailments and not more than 10 patients with "acute" surgical conditions, per intern,

The new plan further stipulates that interniship training should be administered by the Advisory Committee on Internships. There should be within each training hospital at least the following meetings and committees organized: department conference (more than once a week), clinicopathological conference (more than once a month), X-ray conference (once a week, or more),

complication and fatality conference (as frequently as may be necessary), tissue committee meeting (once a month, or more) and journal conference (once a week, or more).

6. Standard for Residency Training

The training of the residents must be controlled by the Residency Advisory Committee, and this training should be supervised by the board-approved specialists in each specialty field. As the time goes by in the course of completion of a 18 month period, the residents will be given additional responsibilities. The first 36 months should be devoted to the ward service, and the residents should serve at least 6 months as the chief resident, during the last one year period.

During their residency, the residents should have opportunities to referesh their knowledge in such basic medical sciences as anatomy, microbilogy, biochemistry, pathology, pharmacology and physiology and will have to attend all the acaemic and clinical meetings and conferences as stipulated for the case of the interns.

7. Medical Societies and the Specialist System

The physician who has completed the residency course will take a qualifying examination given annually by the academic societies of the respective fields, who determine the number of specialists to be produced. There are 16 such societies capable of setting up plans for production of specialists and regulating the training programs. They are: The Korean society of Internal Medicine, the Korean Surgical Society, the Korean Radiation Medicine Society, the Korean Association of Obstetricians and Gynecologists, the Korean Ophthalmological Society, the Korean Dermatological Society, the Korean Urological Society, the Otorhinolaryngology Society, the Korean Pediatrics Society, the Korean Psychiatry Society, the Korean Orthopedic Association, the Korean Neurosurgery Society, the Korean Anaesthesiology,

Society, the Korean society of Pathology, the Korean Society for Preventive Medicine and the Korean Academy of Tuberculosis.

In the near future, a society of plastic surgery is expected to acquire the same status as the other societies in handling matters related to the production of specialists in that fields.

VIII. THE SYSTEM AND PROGRAMS OF PUBLIC HEALTH

1. Population and Health Manpower

According to the census taken as of the end of October 1970 there were a total of 31,900,000 people living in the Republic of Korea. The population had reached thirty million as of the end of 1967, exceeding that of the South and North Korea combined in the year 1944 by about five million. It is estimated that there was about an 8.5 million increase since the 1955 census, due to the high birth rates during the years preceding 1962, when a nation-wide program of family planning was instituted. It is also estimated that the population of Korea, due to the intensive program of family planning, would not surpass the 40 million level even in the year 1985.

There was a time in this country that a rapid increase in population was considered to be a necessity for upkeeping the "national power" and developing industries. However, towards the most recent years, this illusion was replaced by a more realistic thought that an uncontrolled population does hinder economic development and that family planning can be employed effectively in regulating the growth of population.

Owing to the intensive program of controlling fertility, which was first introduced into the government's administrative scheme simultaneously with the implementation of the First Five Year Economic Development Plan and carried through the Second Five Year period, the birth rate, estimated at 40 per thousand in the year 1962, dropped to 28 in 1970. There are sufficient indications to expect that the birth rate will continue to decline in the coming years.

Decline in the birth rate will lower the natural increase rate. It seems all probable that the natural increase rate may be about 15 in 1976, which closes the Third Five Year Economic Development Plan.

Life expectancy at birth estimated at 52.6 years for period 1955–1960 rose to about 62 years by 1966.

Hand in hand with the decline in the natural increase rate and extended life expectancy at birth, urbanization of the population has been dramatic. In the year 1945, only about 12 per cent of the population lived in urban areas. The urban population reportedly constituted 17 per cent of the total population in 1950, 28 per cent in 1960, and about 38 per cent in 1970.

While there is no adequate definition of the indigent population as yet, the Life Protection Law provides that people aged 65 or more and 18 or younger, who lack ability for economic activities, should receive the necessary support and relief medical care to be extended by the government.

Those who received relief medical care in accordance with the provisions of the Law dropped in number from an approximate 3,300 in 1966 to 2,500 in 1969.

With the dramatic shift in population trends, together with the efforts for increasing the number of college or university graduating physicians, there has been a considerable change in the population-doctor ratio during the most recent years. In the year 1970, there were a total 15,026 doctors registered with the Korean Medical Association. Population-doctor ratio was about 2,200 to one. There were a total of 2,207 dentists in the country for the same year, with a ratio of 15,000 population per dentist.

Total registered herb doctors numbered 2,912, and nurses and midwives totaled 14,500 and 6,182, respectively. In 1970, there were a total of 14,600 pharmacists.

Percentages of actual supply of medical or paramedical personnel against the optimum demands, as of 1970, were as follows: Doctors 81 per cent, dentists 78 per cent, pharmacists 98 per cent and nurses 35 per cent. It will be noted that the shortage

of nurses is acute in this country.

2. Health Status

The status of the health of a nation is often quoted as the measure for her political, economic and social development. Especially in a country where a system of social welfare is not well established, the health of the people is linked directly with the nation's power.

A rapid improvement in the health status of the Korean people is exemplified by the drastic lengthening of life expectancy at birth by 11 years, on the average, during the last 10 years. Elevation in the level of income, improvement of living environment and development in public health measures may constitute the chief reasons for this improvement in health status.

Of the leading causes of death, diseases of the digestive tract ranks highest, followed in frequency by respiratory distrubances, communicable diseases, parasitic diseases, accident and injuries and poisoning, according to statistics recently published by the Economic Planning Board.

Another indication of health improvement in recent years is the decrease in the rate of tuberculosis; it was 5.1 per cent in 1965, but was 4.1 per cent in 1970, according to results of a survey. The active cases of tuberculosis were estimated at 0.7 per cent, according to the above survey, and there were a total of 1.9 million tubercular patients in the country.

A mass physical examination conducted in 1968 on 462,000 people disclosed that a total of 45,200 people corresponding to 9.8 per cent were morbid, of whom 1,506 patients or 0.3 per cent had occupational diseases.

3. Health Consciousness of People

Since the establishment of the Government of the Republic of Korea efforts have been made to enhance the level of people's health conciousness, through health education and health services.

The outbreak of the Korean War and the political and social instability that followed has no doubt slowed down the progress in this regard. In case of accidents and diseases, a great majority depend on the drugstores for treatment (61 per cent in the urban area, 53 per cent in the rural area, according to a survey in 1966), and a much smaller percentage (28 per cent urban, 22 per cent rural)resort to the treament of physicians. Some (6 per cent urban, 8 per cent rural) seek medical care by herb doctors practicing Chinese medicine.

A study on health consciousness among patients having suffered from communicable diseases disclosed that 43 per cent had undergone treatment at hospitals or clinics practicing modern medicine, while 28 per cent had visited health centers and another 20 per cent had depended on the drug stores.

Hospital delivery and deliveries attended by professional attendants (doctors and midwives) are increasing. An estimated 19.4 per cent of all deliveries were attended by professionals (1968).

4. Health Budget

During the most recent years the health budget of the Central Government has drastically been increased with the increase of total Government budget, but by proportion it has remained at only about 1 per cent of the total since 1963. Table VIII-1 explains the yearly increase in the absolute amount, and the

Table VIII-1. Health Budget of Central Government by Calendar Year

Calendar year	Health budget	Proportion to national budget
1963	790,000,000 won	1.1%
1964	960,000,000 won	1.3%
1965	890,000,000 won	0.9%
1966	1,430,000,000 won	1.0%
1967	1,760,000,000 won	1.0%
1968	2,390,000,000 won	0.9%
1969	3,270,000,000 won	0.9%
1970	4,390,000,000 won	1.0%

proportion to the total budget.

The health budget put up by the local self-governing bodies has also increased since 1967, but the proportion of health budget to their total budget has remained about 5 per cent, as shown in Table VIII-2.

Table VIII-2. Health Budget of Seoul Special City by Calendar Year

Calendar year	Health budget	Proportion to total budget
1967	528,000,000 won	5.4%
1968	690,000,000 won	5.4%
1969	1,000,000,000 won	5.3%
1970	1,430,000,000 won	6.1%

5. The System of Public Health Administration

All activities concerning public health administration belonged, at the establishment of the Government of Republic of Korea in 1948, to the Ministry of Social Affairs which consisted of 5 bureaus embracing 22 sections, covering the areas of public health, social affairs and labor affairs. In 1948, the Ministry of Health was separated from the Ministry of Social Affairs and became independent. The Health Ministry had three bureaus, Medical Administration, Pharmaceutical Administration and Preventive Medicine. In 1955, the two ministries were merged again to be called the Ministry of Health and Social Affairs.

The Bureau of Relief and Protection was separated from the Ministry in 1961 to be the Office of Relief and Protection, and the Bureau of Labor Affairs became independent in 1963 and the Office of Labor was created. It was in the same year that the Maternal and Child Health Section was created within the Ministry and in the year 1967, the functions of the Hygiene Section were divided by the new Sections, Environment and Food Hygiene. Also, Sections of Tuberculosis, Dental Affairs and Pharmaceutical Guidance were created.

In January 1970, as a preliminary step toward the creation of the Hygiene Bureau, a bureau chief level Sanitation Adminis-

Organizational Chart of Ministry of Health and Social Affairs

trator was created to supervise the Officers of Environment, and Food and Public Nuisance. In February of the same year, another bureau chief level public health administrator was created to supervise the Social Development and License-Registration Officers. At present the Ministry of Health and Social Affairs includes 5 Bureaus, 2 Administrators, 1 Planning Officer, 12 Sections and 20 Officers (See Chart VIII-1, showing the organization of the Ministry of Health and Social Affairs).

There are several important health organizations under the umbrella of the Ministry of Health and Social Affairs,—the National Institute of Health responsible for the inspection of drugs and production of various vaccines, the National Medical Center which is the medical center for the municipal and provincial hospitals, and 10 quarantine stations and special purpose hospitals.

In addition, there is the Korean Institute for Family Planning, established in July 1971 as a special body corporate under the sponsorship of the Ministry of Health and Social Affairs, devoted exclusively to the research and training in the fields of population and family planning.

6. Local Health Administration Scheme

On the Special City or provincial level, the Bureau of Public Health and Social Affairs is responsible for the public health administration. Division of work among various sections and sub-sections of the provincial bureau of health and social affairs vary from one province to another according to the situations of the local self-governing bodies.

Major medical and public health service facilities under the supervision of the Special City or provincial Bureau of Public Health and Social Affairs include the municipal and provincial hospitals totaling 45 throughout the country and the 192 health centers located at guns (county) and small sis (city).

7. Laws and Regulations Concerning Public Health and Medical Care Administration

Most of the laws and regulations currently in effect have been either newly enacted or adjusted since the Revolution on May 16, 1961. In 1969, with a view to exterminating the "three public health evils," namely, the illegal medical practice, illegal medicines and drugs, and unlawful food products, a law entitled, "Special Law on Control of Public Health Crimes" was promulgated. In the following year 1970, the "Law for Administration of Habit Forming Drugs" and the "Blood Administration Law" were enacted. Major public health laws now in effect are listed below:

Title of laws	*Date of enactment*
Special Law on Control of Public Health Crimes	August 1969
Quarantine Law	February 1954
Communicable Disease Prevention Law	February 1954
Narcotics Law	April 1957
Medical Care Law	March 1962
Pharmaceutical Affairs Law	December 1953
Health Center Law	September 1962
Food Sanitation Law	January 1962
Tuberculosis Prevention Law	January 1967
Parasitic Diseases Prevention Law	April 1966
Public Nuisance Prevention Law	November 1963
Medical Insurance Law	December 1963
Auxiliary Medical Care Personnel Law	July 1963
Blood Administration Law	August 1970
Narcotics Administration Law	August 1970
Law Concerning Poisons	December 1963
Law on Autopsy and Preservation of Corpses	January 1962
Law of Korean Institute for Family Planning	December 1970

8. Control of Acute Communicable Diseases

Activities concerning the control of acute communicable diseases include vaccinations against typhoid fever, small pox, diphtheria (with purtussis and tetanus inclusive) and cholera, epidemiological studies on poliomyelitis and Japanese summer encephalitis, treatment of patients inflicted by such diseases as typhoid fever, Japanese summer encephalitis and diphtheria, operation of mobile teams (for control of communicable diseases), quarantine at the air and sea ports, malaria extermination program and health education.

Yearly increase in the immunized population, spread of knowledge about health and sanitation through systematic health education programs, and the intensified medical care system have dramatically reduced the incidence as well as fatality of communicable diseases.

There has been a drastic increase in the production of vaccines towards the recent years. Vaccines produced in the year 1970 are equivalent in quantity to about 7 times those produced in 1966, greatly reducing the import of vaccines from other countries.

According to the statistics of the Ministry of Health and Social Affairs, there were a total of 74,885 patients reported to have contracted first class communicable diseases from 1966 through 1970, with a fatality of 9.6 per cent. Those who have suffered second class communicable diseases during the same period are 254,781, with a fatality rating 0.5 per cent.

Records show that even in recent years there has been a high level of incidence of typhoid fever and fatality resulting from it. In spite of the continued efforts on the part of the health authorities, it seems as though cholera has not yet been eradicated in the country. The incidence as well as fatality of diphtheria and Japanese B-summer encephalitis still appears to be on a considerable level. However, it seems also obvious that there has not been a case of recurrent fever reported

since 1955, no case of small pox since 1958, and no case has been reported of scarlet fever since 1962.

Of the second class communicable diseases, whooping cough and measles appear to be maintaining a significant level of prevalence, while poliomyelitis still deserves a constant watch by the health authorities. The incidence and fatality of communicable diseases for the year 1970 is shown in Table VIII-3.

Table VIII-3. The Incidence and Fatality of Communicable Diseases in 1970

Disease	Incidence in number	Fatal cases
Cholera	206	12
Dysentery	927	26
Typhoid fever	4,221	42
Paratyphoid	33	0
Diphtheria	567	17
Epidemic meningitis		3
Japanese summer encephalitis	27	2
Whooping cough	3,818	6
Poliomyelitis	176	0
Measles	3,625	7
Epidemic parotitis	814	0
Rabies	10	0

Of the difficulties encountered by the health service, limitation in the capacity of producing various vaccines, insufficient supply of trained personnel, unsatisfactory equipment at quarantine stations and insufficient reporting of communicable cases detected are regarded to consitute the major problems that deserve immediate attempts for solution.

9. Tuberculosis Control

Basic measures taken by the health authorities to put tuberculosis under control are as follows:

1. BCG vaccination for children of young ages
2. Early detection of active cases of tuberculosis through sputum and X-ray examination
3. Early registration of T.B. patients with health centers fora free supply of therapeutics until the time of complete recovery

The above steps taken by the government have been positively supported by the technical agreement reached with WHO in 1964 and assistance extended by UNICEF.

According to the record maintained by the Ministry of Health and Social Affairs, the tuberculosis eradication program has registered through the health centers a total of 120,000 patients and has brought 218,000 to complete cure during the last 11 years. Also, in the same period, a total of 12,000,000 people have undergone X-ray examinations, disclosing a total of 670,000 tubercular patients. Together with the X-ray examinations, sputa were collected extensively from residents in the remote areas for bacteriological examination.

These intensive efforts of the Program have reduced the number of tubercular patients, once estimated at 1,900,000 in the year 1965 to about 1,240,000 in 1970. At the moment, if the total capacity of X-ray equipment is to be mobilized, it will detect a total of 100,000 patients annually. Thus, the immediate supply of X-ray equipment to replace older models, lack of facilities for isolating and treating the far advanced cases, and the insufficient supply of trained personnel appear to constitute the major problems of the tuberculosis control program.

10. Parasite Control

Ascaris, hookworms, whipworms, oxyuris, and tape worms constitute the major parasites that create public health problems in Korea. Unsanitary environment, conventional agricultural methods, the traditional custom of inception of raw food, and in some cases, climatic conditions are considered the major factors contributing to the frequency of parasitic infestations.

Roughly, 80 per cent of the population is considered to be infected with round worms, 80 per cent whip worms, 20 per cent with hook worms, 40 per cent with oxyuris, 15 per cent with Paragonimas westermanii and 5 per cent with Chlonorchiasis sinensis.

Measures of the government to control parasitic diseases include improvement of the living environment, mass administration of anthelmintic drugs with the population in ages of rapid physical growth and development, and health education services enforced since the promulgation in 1966 of the Parasitic Diseases Prevention Law. These efforts have resulted in a drastic decrease in the parasite-infected population, but frequent re-infections appear to be an issue that deserves attention for some time to come.

As one of its measures for improving the living environment, the Ministry of Health and Social Affairs has designated 55 areas in the vicinity of large cities as night-soil free cultivating areas, set up 66 distribution points for vegetables grown free of night soil, and recommended use of septic tanks that separate feces from the urine, so that only urine could be used as fertilizer.

11. Leprosy Control

Compared with a couple of decades ago, leprosy as a social problem has diminished today in its seriousness. The advent and availability of chemotherapy for this "heaven's punishment" have increased the recognition that it is just one of the chronic diseases that is controllable. However, for some part of the population, the traditional concept about this ailment persists, hindering early discovery and delaying treatment.

It is estimated that there may be a total of 80,000 infected with leprosy, but only a half or about 40,000 have been registered. The negative cases, even after completing treatment, must live in resettlement camps numbering 66 in the country due to social segregation. Efforts are being made to discover 3,000 unreported cases of leprosy through mobile clinic approaches.

12. Venereal Diseases Control

The vernereal diseases are classified as Third Class Communicable Diseases. Control measures so far consist of regular

examinations of special groups of women—prostitutes, workers of entertainment facilities, and some times dancers.

Prostitution is outlawed in Korea. Especially following the May 16 Revolution, the prostitutes were permitted to live in the "guidance areas" only and had to undergo periodical physical examinations. Many of these areas had to be abolished, however, and there does exist the danger of venereal diseases being spread through those prostitutes who escape inspection and examination. A total of 1,140,000 cases of venereal diseases have been discovered since 1960. Of these cases, 7 per cent were syphilis, 77 per cent gonorrhea, and 17 per cent others.

13. Mental Health

Cases of mental diseases appear to be on the increase with the rapid change in the environmental conditions—urbanization and modernization. While scientific data suggesting the number of psychoneurotic patients are deficient, it is roughly estimated that there might be about 300,000 cases or about one per cent of the total population requiring medical and health care. Of these cases, about 35 per cent are assumed to be psychoneurotic, 19 per cent schizophrenic, 12 per cent epileptic, and 31 per cent those with other conditions.

One of the major problems in mental health is that of insufficient facilities to accommodate and treat these patients. There are only 362 beds at the National Mental Hospital, 627 beds with the public mental hospitals. The ratio is only 3.5 beds for 100,000 population.

14. Dental Health

Significance of dental health increases with income and cultural standards. While data for incidence of decayed teeth are not available, it is generally assumed that about 70 per cent of the entire population might have a decayed tooth.

As part of the Government program, a total of 200,000

children received fluoridation in 1970 and mobile dental teams dispatched by the provincial health authorities provided about 100,000 people with dental care.

15. Measures Against Public Nuisance

A rapid increase in population, urbanization, hard pressed and continuous economic development, installation of industrial plants within and around large cities, increase in the demand of energy, and abrupt increase in the traffic are considered to be some of major factors rendering public nuisances a social and public health problem.

A rapid environmental pollution is indicated by the atmospheric content of SO_2 in Seoul area measured at 0.078 p. p. m. in 1969, as compared with 0.00058 p. p. m. in 1965. and the BOD estimated at 17.8–34.8 mg/L and B. coli measured at 76,000–359,000 MPN in the Han River, from where most of the households in Seoul Special City receive their drinking water supply.

General concern about environmental contamination was not aroused until 1962, when the Government undertook implementation of its long range economic development plan. The Law for Prevention of Public Nuisance was promulgated in the year 1962. A sub-section was organized in 1970 within the Ministry of Health and Social Affairs to handle the matters related to public nuisances. In the same year, a Public Nuisance Prevention Officer was located at the Ministry in 1970. At the local level, a Public Nuisance Prevention Sub-Section was established within the administrative scheme of the Seoul City Hall, in 1968.

So far, according to the provisions of the Law, measures against public nuisances include issuing of orders to repair and remodel equipment, change the methods of operation, suspend work, and to move the installations. These administrative steps were taken mostly upon results of inspections carried out by the officials concerned and petitions filed by the citizens. In order, however, to cope with the ever aggravating impact of public

nuisances the Government resolved to take more positive measures by amending the Public Nuisance Prevention Law near the close of the year 1970, which was to be enforced as of August 1971.

16. Food Hygiene

Recently, as in other developing countries, demand for processed or manufactured foods has increased dramatically. Also, the increase in the kinds and varieties of food products has added to the significance of administrative measures taken in food hygiene.

Food hygiene in Korea was first institutionalized with the enactment of the Food Hygiene Law in 1962. Inspection of and guidance for food processing or food manufacturing installations, standardization of quality and quantity of various food products, and strengthening of the Government function in the inspection of processed food comprise the major administrative measures supported by the Law.

During the last 10 years, food processing or food manufacturing firms have increased from 12,000 to about 22,000, while the "entertainment facilities" serving food have made a dramatic increase from 25,000 to 60,000. Modernization of equipment and machinery and effective measures to improve quality of food through inspection and proper guidance have become one of the major public health issues of the country.

17. Public Health and Medical Care Facilities

The public health and medical care network in Korea consists of the public and private health and medical care facilities linked together and systematically supervised. It is designed to prevent and treat diseases and to combine all the strengths of health centers, health center branches, hospitals and clinics at times of emergency.

18. The Health Centers

The enactment of the Health Center Law in 1956 initiated the establishment of health centers in Korea. The Law was amended in 1962, immediately after the May 16 Revolution. A total of 189 health centers were established, one center for each city (small sized), district and county. In 1970, the total number of these local health service units were increased to 192. Thus there are 52 health centers in the urban or semi-urban areas and 140 centers in the rural areas. Each urban health center has 211,000 people on the average under its jurisdiction, while each rural health center serves an average of 144,000 people.

The health center staff which numbered 470 throughout the nation during the earlier period has been expanded to 5,080 in 1969, owing to the continuous efforts made by the government to strengthen the activities of these core units for public health service.

The principle underlying the enactment of the Health Center Law is to provide the people with "comprehensive health and medical care." The essential health center activities include staging intensive programs of health education, maintaining accurate health statistics, improving nutrition, maintaining a high standard for food processed or manufactured, protecting the environment from pollution and contamination, looking carefully into the health status with newly arising and newly increasing industrial establishments, implementing effective programs of school health and dental health, controlling and treating communicable diseases, studying endemic diseases, placing the various medical practitioners under effective control and supervision, supervising the production and supply of medicines and drugs and carrying out the programs of maternal and child health and family planning.

19. Problems with Health Center Activities

Health education is regarded to be one of the most impor-

tant activities of health centers. However, in spite of repeated efforts to strengthen health education activities, in many of the health centers, difficulty in securing trained health education workers, insufficient supply of educational materials, and lack of effective planning and efficient supervision appear to be limiting the effect of education.

Statistics concerning vital events, incidence of communicable diseases, food poisoning and medical care activities, and clinical records are also important elements of health center activities. Due however, to insufficient supply of trained personnel and the discrepencies in laws and regulations, health statistics produced by many of the health centers have not reached the point of making a radical contribution to the evaluation of the health programs and planning of short and long term public health programs.

Whereas the guidance and improvement in the nutritional phase of public health activities are stipulated by Law as one of the essential functions of health centers, no tangible evaluation of the progress has ever been made. Activities pertaining to environmental health, mostly of a regulatory nature, are consigned with the local administrators, and are handled by gun (county) governors according to the provisions of the Law and at times by health center directors, thus lacking uniformity of system. A deficient supply of trained personnel constitutes one of the factors affecting management of work related to environmental health.

School health programs are under the supervision of the Ministry of Education and the health centers are responsible for only the supporting activities. The duality of the program operation constitues another problem in view of achieving efficiency in this all important phase of public health activity.

The right to appoint a health center director lawfully belongs to the Si (city) and Gun (county) governors, except in Seoul Special City where the mayor holds the right. With most of the health centers, the right to appoint regular staff members of the centers does not belong to the director but to the Si or Gun governors, which complicates the rights of selecting one's own staff.

20. The Medical Care Facilities

As the facilities providing medical care, hospitals, clinics (of private practitioners) and drug stores constitute the key institutions making up the national health and medical care network. In 1969, there were a total of 219 general hospitals with 16,270 beds, 5,163 private practitioners' clinics, 1,219 dental clinics, 2,434 herb clinics practicing China-originated medicine, and a total of 7,937 drug stores.

21. Measures to Assist Doctorless Myuns (Townships)

As has been discussed in the preceding sections, a considerable proportion of the remote Myuns (townships) still remain doctorless, forming serious functional gaps in the national health and medical care network. In the year following the May 16 Revolution in 1961, the Ministry of Health and Social Affairs mobilized doctors who had not completed military duties to remote doctorless areas (in 1962 and 1963). In addition, the Ministry gave public health training to some of the herb doctors for a short period and assigned them to the remote areas in need of medical care facilities, as the "physicians authorized to practice in limited areas."

In addition, with a view to further fortifying the health network, the Ministry of Health and Social Affairs has undertaken establishment of the health center branches throughout the country, excluding the Ubs (towns) and Myons (townships) already having a health center. This program, however, has met with a serious setback, due mainly to the deficient supply of physicians, delay in the financing of the installation of physical facilities including the buildings, and partly to the delay in enactment of necessary ordinances on the part of some of the provinces.

As part of its measures to assist the doctorless areas, the Ministry has a plan to place physicians applying for studies abroad to the positions at these areas, permitting travel overseas only after they complete their terms. This has caused many of the

contemporary disputes and resistance among the physicians.

At the moment, 18 mobile medical care teams are making rounds of the geographically handicapped areas and 5 boats are visiting off-shore islands, with doctors, nurses and medical supplies on board.

22. Medical Support for Vietnam

A Korean Civil Medical Care Group, with 98 members, is in action in Vietnam. This Group consists of the Headquarters in Saigon (with 5 persons), 7 Medical Teams in the local areas (47 persons) and 4 Sanitation Teams (46 persons). The activities of the Group are financially supported by USAID. The Group is organized with 25 doctors, 17 nurses, 22 sanitarians, 6 laboratory technicians, 6 X-ray technicians, 4 sanitary assistants, 6 administrators and assistants, 5 health statisticians, and 7 supply and repair workers.

A Korea-Vietnam Medical Center with 250 beds will be constructed in Saigon, as part of Korea's assistance programs to Vietnam.

23. Medical Insurance

The medical insurance system was first institutionalized in Korea with the enactment of the Medical Insurance Law in 1963. The application of the provisions of the Law have so far been confined to workers of industrial establishments and their dependents in three pilot project areas. The Law was amended in 1970 to enlarge the category of recipients who will benefit from the Law, to include laborers, civil servants, soldiers and enterprise owners. It is considered, however, that further improvement in the basic schemes of the medical insurance system would become a necessity, in fixing the various fees at realistic rates, securing funds from the national treasury and training professional workers to administer this new program.

24. Family Planning Program

It is a generally accepted concept that family planning in a developing country can play the major role in increasing per capita income, permitting increase in investment, improving labor productivity, and in keeping the demand for food supply low.

The Family Planning Program of Korea implemented since 1962 consisted of intensive education-cum-enlightenment, supply of various contraceptives and appliances, and providing free IUD insertion and vasectomy services. Administration of the nationwide family planning network, operation of the evaluation work, maintaining the mobile service and training of workers constitute other important facets of the Program.

During the nine-year period beginning in 1962 and ending in 1970, a total of 3.2 million people of reproductive ages have received one or other service from the program, of whom 1.9 million have accepted insertion of IUDs while a total of 150,000 men have been vasectomized. Oral contraceptive pills were first introduced into the program in 1968 on a nation-wide scale and a monthly average of 490,000 women are reported to be taking the pill regularly.

Current practice of contraceptive methods among married women of reproductive ages rose from 9 per cent in 1964 to 20 per cent in 1967, and the rate is believed to have further increased to about 29 per cent by 1969.

The natural increase rate, estimated at 2.9 per cent for the period 1955–1960 fell to 2.5 per cent for period 1961–1966, and further to 1.9 per cent during period 1966–1970, according to the estimates based on the census and other data. Much of the credit for this dramatic reduction in the natural increase rate should go to the family planning programs intensively carried out during the last decade.

In order, however, to assure further efficiency of the program and continuous reduction of the nation's fertility, such problems as recruitment of trained workers, achieving flexibility of the program, plans to meet the need of each locality, strength-

ening of the evaluation work, designing and implementing education measures to promote a radical change in the psychology-behavior of the people, and devising new programs to embrace the younger generation who are facing marriage or those in early marital life, are believed to deserve immediate attention and measures for solution.

25. Maternal and Child Health

The health services for mothers and children, regularized since 1967, are being intensified with the progress of the family planning program. The chances for the family planning program to make a success will be limited, if there is no assurance that every child born will grow healthfully and normally.

The maternal and child health program of Korea consists so far of provision of care to insure safe deliveries, prenatal and post-partum care, infant and child care and training of field workers. Through the program, a total of 260,000 deliveries were attended by the program midwives, 300,000 expectant mothers were registered for health supervision and 340,000 infants and children received care during the four year period begining in 1967.

The maternal and child health program, with only a few years' history, has so far reached only a fraction of the population that requires assistance. With the progress of long range development and modernization projects of the government, and with the increased realization of the need for bringing up human resources, healthful both physically and mentally, the importance of the health services for mothers and children will receive its due recognition.

IX. THE POPULATION AND ITS CHARACTERISTICS

1. The Population

The population of the Republic of Korea as of 4:00 P.M. 20 September 1971 was 32,015,417 according to the Population Clock, installed at Bureau of Statistics, Economic Planning Board.

2. Population Growth

Everyone today knows that we live in an era of what is called the "population explosion," which characterizes most of the developing countries in the world, and Korea is no exception to this. Problems evolving from population growth at an unparalleled pace are multifarious and of immeasurable magnitude.

Population growth was the concern of but a few students for many years in Korea until the early 1960's when its gravity began to receive added recognition. Such recognition materialized in the year 1962 when the Government of the Republic of Korea adopted a series of measures to cope with problems accompanying population growth as a part of its Economic Development Plan.

Present-day Korea is characterized by ambitious undertakings launched by the Government on a national scale to promote family planning and by the intensification of studies in various fields to produce data useful to the program.

Our population statistics indicate that during the last 50 years the rise in both the natural increase and population growth rates has been dramatic as shown in Table IX-I.

Table IX-1. Natural Increase Rate and Population Growth Rate(%)

Years	Natural increase rate	Population growth rate
1910–15	10.0	8.7
1916–20	7.4	7.0
1921–25	17.1	15.4
1926–30	17.6	14.5
1931–35	20.8	16.7
1936–40	20.9	11.8
1941–44	25.8	16.3
1945–49	25.8	44.2
1950–55	15.0	10.2
1956–60	28.8	28.8
1961–65	26.8	26.8
1966–70*	19.2	19.2

*Source: Economic Planning Board. *Tentative estimate.*

3. Population Density

The Republic of Korea has an area of 98,409 square kilometers. The yearly population densities are shown in Table IX–2 showing that the population density for the year 1965 was 2.6 times that for 1944.

South Korea is known to have had a higher density com-

Table IX-2. Population Density

Year	Population density (per square kilometer)
1910	59.4
1915	72.2
1920	78.1
1925	86.1
1930	92.5
1935	100.5
1940	106.6
1944	113.7
1949	204.9
1955	218.4
1960	253.9
1965	291.1
1970*	319.6

Note: The population density up to Liberation (in 1946) is that of South and North Korea combined.

*Source: Economic Planning Board, Republic of Korea; Korea Statistical Yearbook, 1966. *Tentative estimate.*

pared with North Korea even in the pre-Liberation period, and the marked difference in the densities between the whole country and South Korea for 1944 (11.37 and 173, respectively) exemplifies this, as does the jump from 1944 to 1949. The Netherlands is known to have the highest population density, followed in order by Belgium and Taiwan. Korea ranks 4th among all nations in population density. The large proportion of land which is mountainous and thus unoccupied renders the problems encountered even more serious.

4. Births

The birth rates of different periods over the last five decades published so far by the authorities, based apparently on vital events registrations, are shown in Table IX–3.

Table IX-3. Birth Rates by Different Periods (Per Thousand)

Year	Birth rate
1910–14	24.0
1915–19	31.5
1920–24	34.2
1925–29	37.5
1930–34	32.8
1935–39	32.1
1940–44	34.7
1960–65	40.6
1966–70	28.0

Note: 1. The rates for period up to Liberation are those for South and North Korea combined.
2. The rates for 1960–1970 period are tentative estimates.

5. Deaths

The computation of death rates has come from vital events registration, and their accuracy has been quite dependent upon the sufficiency of registration. Table IX-4 summarizes information regarding death rates, based on figures published by the Government.

Table IX-4. Death Rate for Different Periods (Per Thousand)

Year	Death rate
1910–14	14.6
1916–19	24.3
1920–24	21.3
1925–29	21.9
1930–34	20.1
1935–39	18.7
1940–44	18.9
1960–65	12.2
1966–70	8.8

Note: 1. *Rates for period up to Liberation are those for both the South and North Korea combined.*
2. *Rates for period 1960–1970 are tentative estimates.*
Source: *Economic Planning Board; Korea Statistical Yearbook, 1955.*

6. Infant Death Rate

Since accuracy of infant death rates is dependent largely upon the deaths reported in a given period, it would be inadequate to expect to obtain reliable dates at the present time.

Before the departure of the Japanese from Korea in 1945 Mizushima reported infant death rates computed at about 250 per thousand for the years 1925–1930, and 106.6 and 200.1 per thousand for males and females in Seoul City, respectively, for the years 1931–1935. Also Fujiwara gave estimates at 150–200 per thousand.

Other reports on infant death rates in Korea include that

Table IX-5. Infant Death Rates for Period up to Liberation(Per Thousand)

Year	Male	Female	Average
1911	46.7	43.6	45.3
1915	59.3	54.2	56.9
1920	50.9	52.0	51.4
1925	63.6	59.8	60.8
1930	62.1	56.0	59.2
1935	85.1	79.1	82.3
1940	115.3	97.9	106.9
1944	123.0	107.8	115.6

Note: *The above rates apply to entire area, with South and North Korea combined.*
Source: *Ministry of Health and Social Affairs Republic of Korea; Yearbook of Public Health and Social Statistics, 1965.*

Table IX-6. Infant Death Rate (Per Thousand)

Researcher or estimator	Years investigated	Area of investigation	Infant death rate		
			Total	Male	Female
H. J. Park*	1954–59	Rural Korea	82.9	85.7	79.7
D. J. Yun*	1957	Rural area in Chulla Pukdo	63.8	—	—
Y. Kim	1955	All nation	134.0	—	—
	1960	All nation	121.0	—	—
M. M. Kim	1955–60	All nation	107.93	118.09	97.78
H. J. Park et al*	1962–63	All Chungchong Namdo	67.6	68.4	66.8
E. H. Kwon et al*	1962–64	Seoul City	35.5	37.7	33.1

Note: **indicates researchers, other estinatiors.*

Source:

1. *Park, H. J.; A Study on Infant Deaths in Korean Rural Area, Seoul University Journal, Vol. 3, No. 4.*
2. *Yun, D. J.; Infant and Child Mortality in a Korean Rural Area Graduate School, Yonsei University, 1960.*
3. *Kim, Y.; Projections of Korean Population, Statistical Monthly Report, Vol. 3 No. 1, 1961, B.O.S., Ministry of Home Affairs.*
4. *Kim, M. M.; The Outline of Population Trends for the Republic of Korea, 1945–1964, Journal of Population Seoul, Initial Issue, 1965, The Institute of Population Problems.*
5. *Park, H. J. et al.; A Study on Age Specific Death Rate and Expectation of Life in a Korean Rural Area, Seoul University Journal Medicine and Pharmacy Series(c), Vol. 15, 1964.*
6. *Kown, E. H. et al.; Seoul National University Sungdong Gu Action-Research Project on Family Planning . . . A Progress Report . . . (For Period July 1964, December 1965), The School of Public Health, Seoul National University, 1966.*

of the Ministry of Health and Social Affairs summarized in Table IX-5, listing rates definitely lower than the estimates of the different researchers quoted above. These low rates produced by the Government's statistics are to be understood in light of inactivity in registering vital events.

Some infant death rates obtained from studies carried out since 1945 are quoted in Table IX–6. Here it is apparent that the rates based on surveys are always higher than those from the surveys or censuses discussed above, which is understandable in terms of the poor registration of events. Also, the lower urban figures are indicative of the urban superiority in public health and medical care. A study in an urban slum area, however, set forth an even higher rate of infant mortality (108.4 per thousand).

7. Life Expectancy

With the efficient enforcement of measures for health and medical care and with the general living standard steadily being improved, the last four decades have seen a drastic increase in the expectation of life at birth, as shown by Table IX-7

Table IX-7. Life Expectation at Birth

Year	Expectation of life at birth		
	Both sexes	Male	Female
1934–36	45.80	44.70	46.70
1938–42	46.80	44.50	49.00
1959–60	52.60	51.11	53.73
1961	57.90	54.92	60.99
1965	61.41	58.10	64.71
1967	63.14	59.70	66.57

Source: Economic Planning Board

8. Age Composition

The population of 0–14 years of age occupied 43.9% of the total and that of 65 years of age and more 3.4%, as of 1966 (Figure IX-1). Sex ratio in 1966 was 101.3. In the number of school

population, comparing the status of 1967 with that of 1945, primary school population increased by 4 times, middle school by 22 times, high school by 10 times and college or university by 21 times. Illiteracy rate in whole country is no more than 20% at the present day.

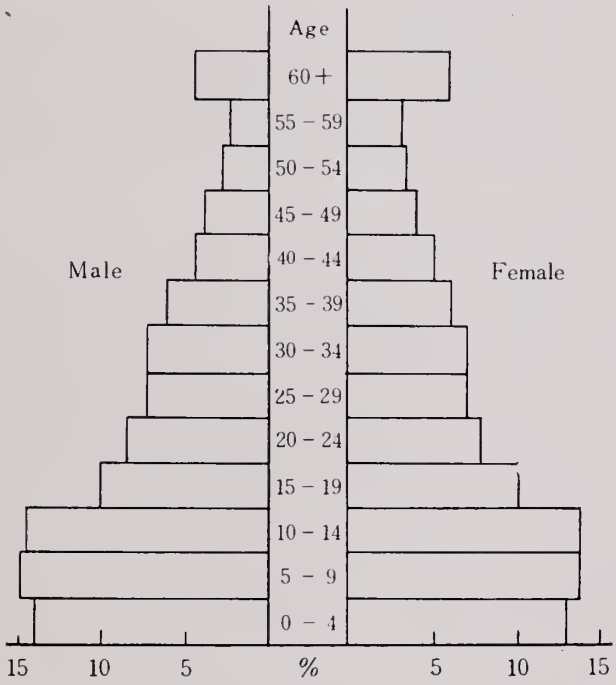

Figure IX-1. *Population Composition*

Source: Bureau of Statistics, EPB, 1970 October, Census preliminary tabulation based an a sample of 1/20.

9. Urbanization of Population

Urbanization of population was quite negligible in Korea before the Liberation. The urban population in 1920 was only 3.4% of the whole population, no more than 5.6% in 1930, and

reached 11% in 1940. After the Liberation the process of urbanization was given a definite impetus. The urban population reached 17.2% 1949, 24.5% in 1955, 28.0% in 1960 and 33.6% in 1966. This rapid urbanization may be in part attributed to industrial development, although there are still other factors to be considered.

Though urbanization is underway almost universally, it is also true that population concentration is much sharper in large metropolitan areas than in middle sized cities and small towns. For example, the population of Seoul and Pusan was 14.4% of the whole popultion in 1960 and 17.9% in 1966.

10. Projected Population

The Bureau of Statistics of the Economic Planning Board made a projection of population for the period between 1960 and 2000. Four different estimates were applied to this projection, namely the high (high birth, high death), high medium (high birth, medium death), medium-medium (medium birth, medium death) and low (low birth, low death) estimates. The population was projected at 43,210,000 in 1980 and 76,793,000 in 2,000 by the high estimate, 46,025,000 in 1980 and 93,694,000 in 2000 by the medium-high, 42,727,000 in 1980 and 72,718,000 in 2000 by the medium-medium and 41,080,000 in 1980 and 60, 832,000 in 2,000 by the low.

11. Efforts for Improving Vital Statistics

The incompleteness or inconsistencies, if any, in the statistics of Korea are most frequently concerned with vital statistics. They suffer, to a large extent, from insufficient reporting of vital events by the people, and are much more deficient than are the "stationary" statistics based on the censuses or resident population surveys sponsored by the administrative authorities.

Efforts have been launched by both the economic and family planning ends of the Government's activities to improve regis-

tration of vital events, which include many exploratory surveys and research undertakings.

12. History of Population Statistics

The Age of the Three Kingdoms and the Koryo Era

The history of population statistics in this country might be traced back to Ancient Korea, when the nation was beginning to be shaped. It is not difficult to assume that such acts as conscription, labor exaction and taxation must have had some form of population survey as a prerequisite. It was not until the Ages of the Three Kingdoms (Silla, Paikje and Koguryo), however, that counting of population was first institutionalized. This is seen in an excerpt from "Samgook Yoosa," a compilation bearing on historical events in the Three Kingdoms, recording that Kyungju, the capital of Silla, had a total of 178,946 households at the height of its prosperity.

The Koryo Era, which succeeded the Ages of Three Kingdoms, was characterized by feudalistic centralism, accompanied by rather strict census inquiries with penal regulations for violations. The frequent wars and the increase in private ownership of cultivated land, with ensuing frequency and scope of military conscriptions, labor exactions and taxations, inevitably led to gross omissions in the censuses that were taken.

With only fragmentary records appearing here and there in books on the history of the period from Ancient Korea to the close of the Koryo Dynasty(which corresponds to the close of the Fourteenth Century), it is not easy to assess the number of households and the size of the population. We can only guess, however, based on various records, that the population on the Korean Peninsula at the dawn of our history might have been around three million. Reliable data on the population at the close of the Koryo Dynasty are not available either, but it would not be unreasonable to assume, based on the records available for the Chosun Era of the Yi Dynasty, that the population at the close of the preceding

Dynasty or Koryo Era might have been around ten million.

Yi Dynasty

The census register system, employed first by the Koryo Dynasty, continued under the Yi Dynasty for a while, until a new system came into being. The "Inbochang Bob," or the "Do-orplate Act" was promulgated in 1428 requiring the people to put up a name tablet at each door or gate.

The "Hogu Sik" or household register system, enforced in 1428 (10th Year of King Sejong's Reign), provided for procedures for census registration, in which two copies of the census register were to be prepared by the Government upon reporting of events by the people. Of these,one copy was to go into the file of the authority and the other handed out to the reporter. No duplication or re-issuance of copies was authorized. Such census taking was to be repeated every three years. The census system of the Yi Dynasty reached its maturity at the time of King Sungjong (1940–1494).

The census register of the Yi Dynasty, however, was either incomplete or missing for the period from 1395 to 1639. It is for the 150 year period beginning in 1639 (up to 1789) that records are available as to the censuses taken at three year intervals.

For example, the 1639 census recorded that the population for that year was 1,521,165 which presumedly excluded those aged 60 or above and 16 or below. Effort seems to have been made starting with the 1669 census to cover the entire population, which still is believed to have had inevitable omissions, especially for infants and children. The largest register available throughout all periods of the Yi Dynasty was that of the 7th Year of King Soonjo (1807), which specified 1,760,000 as the total number of households and 7,560,000 for the population. Records for 1904, a century later and at the close of Yi Dynasty, however, indicated drastic drops in the numbers of households and population, the reductions being 340,000 and 1,630,000 respectively from the corresponding figures for 1807. The gross under-enumeration which undoubtedly caused this decrease may be construed as

reflecting the weakness and misrules of the Yi Dynasty at its later periods.

Varying figures are recorded for the census of the year 1906 by the Ministy of Interior of the Korean (Hangook) Government and by the Security Advisory Group (Japanese) then stationed in Korea: a total of 1,384,493 households with a population of 5,793,976 by the former and 2,842,263 households and a popuation of 12,924,282 by the latter. On the other hand the total numbers of households and the size of population as of the end of 1910, investigated by the Government-General of Chosen immediately after the annexation, turned out to be 2,749,956 and 13,128,780 respectively.

Period after Liberation

This period is characterized by the repatriation of a large number of people from overseas and also by the movement of another large number of "refugees" from the north into the south. We shall review in the following the data on population statistics published for different periods.

Period from 1945 to 1948

The U. S. Military Government in Korea staged the first population survey after Liberation as of 25 August 1946, which assessed the total population in South Korea at 18,369,000. According to the "Overall Registration" of the people enforced by the U. S. Military Government in the following year, 1947, the population was 19,800,000. The population for the year 1958, also investigated by the U. S. Military Government, was 20,027,000.

The 1946 statistics on population were compiled by adjusting the 1944 census result according to the population placed on the rations program and by in-and out-migration figures. The assessments of 1947 and 1948 should also be interpreted as having been made on a tentative basis. The "Total Population Census" taken as of 1 May 1949 represented virtually the first of its kind since the establishment of the Government of the Republic of

Korea.

Period from 1950 to 1954

The population estimates for the years 1950 and 1951 were made by the Ministry of Health and Social Affairs based on the 1949 population, while that for 1952 was made by the Ministry of Home Affairs who adjusted the 1951 population by reports from local government officials.

Reasons accounting for the abrupt increase of 1,000,000 in 1953 over the population for the previous year are presumedly multifarious. The inaccuracy in the population placed on rations and the potential omissions inherent with the 1952 population, during war time, may be examples. The 1954 population count also is an estimate by the Ministry of Health and Social Affairs. Suffice it to say here that the populations so far estimated for the years 1950–1954 lack reliability.

Period from 1955 to 1965

A simplified total population count was made on 1 September 1955, for the first time since the outbreak of the Korean War in 1950. Thereafter the Government published a "resident population" at each year-end.

The Census

Since the Government of the Republic of Korea was established, a total of four censuses have been taken, as follows:

1) Total population survey in 1949

   The Total Population Survey was carried out by the Republic of Korea Government on 1 May, the first since its establishment. The Korean War broke out in June of the same year and left in its wake only partial results such as the total population with breakdowns by occupation, sex, and age.

2) Simplified Total Population Survey in 1955

   The field work was done as of 1 September, according to the procedures agreed upon with representatives from

the United Nations.

3) The 1960 Census*

A census on the largest scale ever seen in the history of the country was conducted. It convered the topics of population, housing, and agriculture. With the positive cooperation extended by international organizations, there reportedly was a renovation in methodology. The foreign population resident in Korea was also covered by this Census.

* *An adjustment was made to the total population of 1960, as a result of a postsurvey, increasing it from 24,989,000 by about a 1.4 per cent, according to the New Population Projections of Korea, 1964, by the Economic Planning Board, Republic of Korea.*

4) "Total Population Survey" in 1966

A census was taken as of 1 October 1966, to explore such areas as employment, fertility levels and military as well as civilian population resident overseas, in addition to the general field of population statistics as covered previously.

5) The Cemsus in 1970

The data from this Census are being processed at the Bureau of Statistics, Economic Planning Board.